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THE MISSISSIPPIAN BRACHIOPODA

OF THE

MISSISSIPPI VALLEY BASIN

PLATES

BY

STUART WELLER

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Plates and Explanations

(All figures are natural size unless otherwise indicated.)

The collection in which each specimen used for illustration may be found, has been indicated in the explanation of the plates. The abbreviations used are as follows:

W. M.—Collection of Walker Museum, University of Chicago.
U. M.—Collection of the University of Michigan.
A. M. N. H.—Collection of the American Museum of Natural History, New York.
U. S. N. M.—Collection of the United States National Museum, Washington, D. C.
I. S. M.—Collection of the Illinois State Museum, Springfield, Ill.
R. R. R.—Collection of R. R. Rowley, Louisiana, Mo.
D. K. G.—Collection of D. K. Greger, Columbia, Mo.
F. A. S.—Collection of F. A. Sampson, Columbia, Mo.

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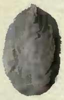
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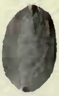
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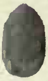
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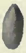
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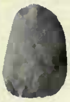
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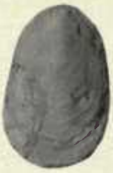
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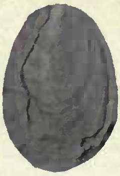
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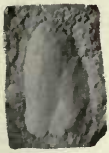
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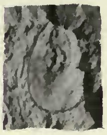
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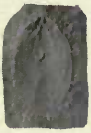
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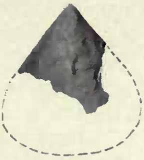
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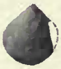
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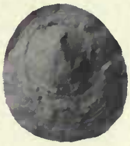
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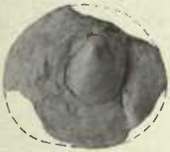
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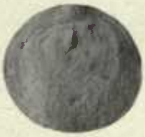
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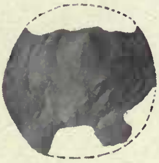
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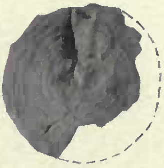
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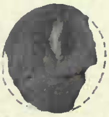
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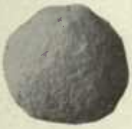
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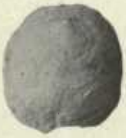
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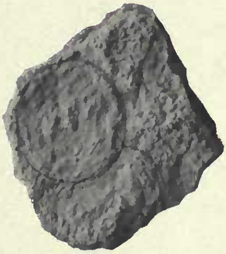
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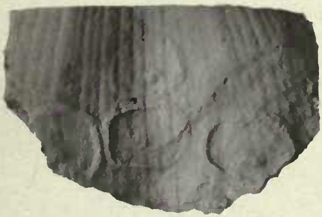
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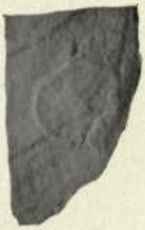
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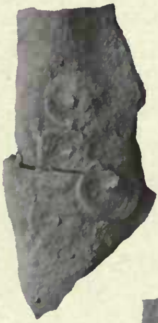
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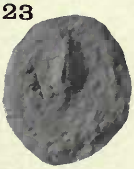
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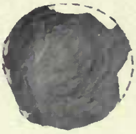
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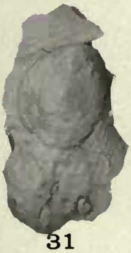
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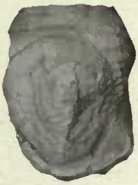
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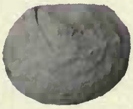
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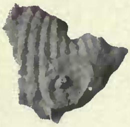
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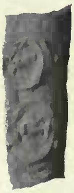
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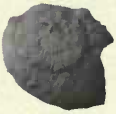
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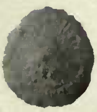
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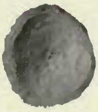
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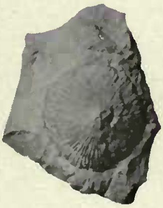
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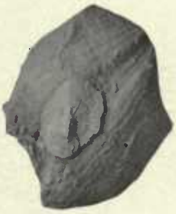
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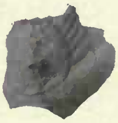
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EXPLANATION OF PLATE II.

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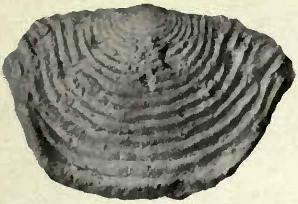
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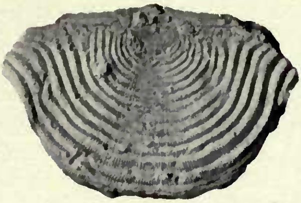
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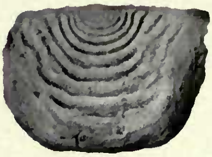
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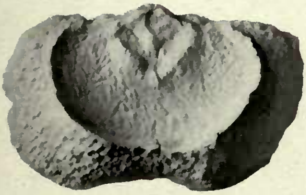
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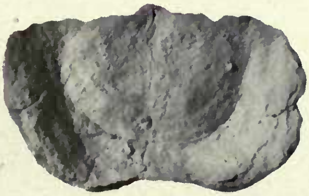
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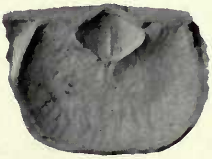
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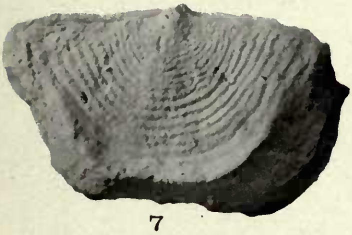
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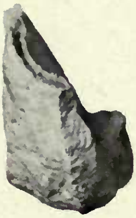
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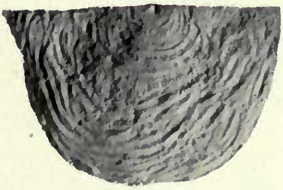
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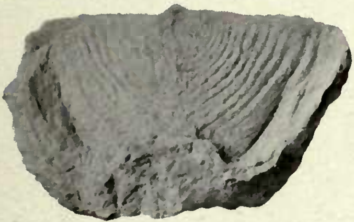
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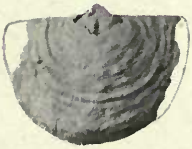
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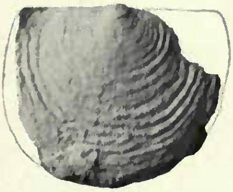
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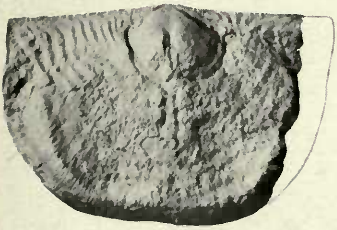
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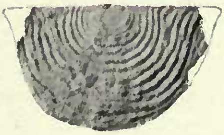
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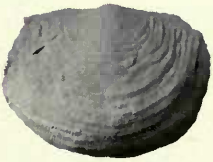
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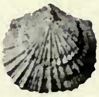
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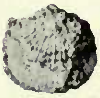
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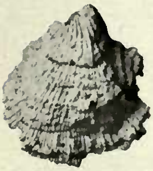
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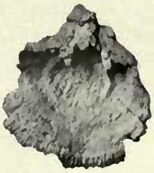
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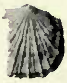
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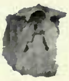
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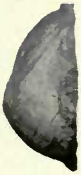
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EXPLANATION OF PLATE III.

Figs. 1-9. SCHUCHERTELLA LENS (White)..............................p. 55

1-3. Brachial, pedicle and posterior views of a nearly perfect specimen. 4. Brachial view of another nearly perfect specimen. (W. M., No. 6693.) 5-6. Exterior and interior views of a very perfect pedicle valve. 7. Interior view of a brachial valve. 8. Interior view of a pedicle valve. (W. M., No. 13051.)

Louisiana limestone, Louisiana, Missouri.

9. View of a large brachial valve. (W. M., No. 14258.)

Louisiana limestone, Calhoun County, Illinois.

Figs. 10-11. SCHUCHERTELLA RUBRA Weller..............................p. 56

Brachial and pedicle views of the holotype. (W. M., No. 13911.)

Fern Glen formation, near Kimmswick, Missouri.

Figs. 12-13. SCHUCHERTELLA FERNGLENENSIS n. sp......................p. 54

Pedicle and brachial views of a nearly complete but somewhat distorted specimen, the holotype. (W. M., No. 13910.)

Fern Glen formation, Fern Glen, Missouri.

Figs. 14-16. SCHELLWIENELLA INÆQUALIS (Hall)......................p. 61

14. A nearly complete internal cast of a brachial valve. (W. M., No. 6662.) 15-16. Two nearly complete internal casts of pedicle valves. (W. M., Nos. 14755 and 14754.)

Kinderhook, Bed No. 5, Burlington, Iowa.

Figs. 17-18. SCHELLWIENELLA CRENULICOSTATA n. sp...................p. 63

17. View of a very perfect pedicle valve, the holotype. (W. M., No. 14233.)

Kinderhook oolite, Bed No. 6, Burlington, Iowa.

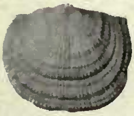
18. View of a modified internal cast of a nearly complete pedicle valve probably belonging to this species. (W. M., No. 14499.)

Kinderhook, Bed No. 5, Burlington, Iowa.

Figs. 19-22. SCHELLWIENELLA PLANUMBONA n. sp.....................p. 65

19-20. Two nearly complete but more or less exfoliated pedicle valves. (W. M., No. 14756.) 21-22. Two incomplete and more or less exfoliated brachial valves. (W. M., Nos. 6671 and 14756.) Cotypes.

Kinderhook oolite, Bed No. 6, Burlington, Iowa.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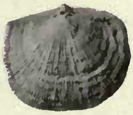
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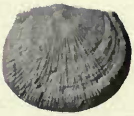
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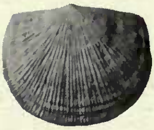
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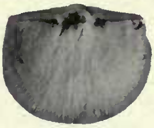
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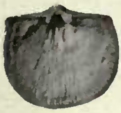
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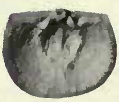
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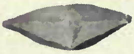
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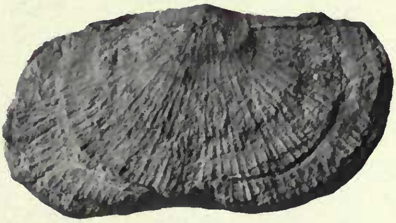
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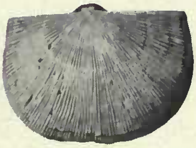
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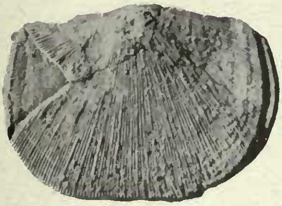
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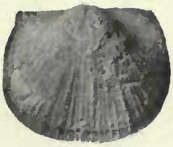
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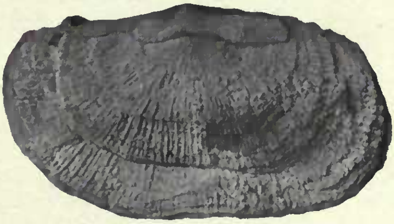
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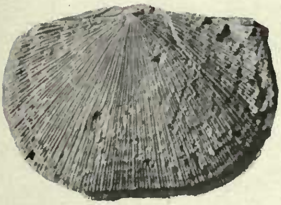
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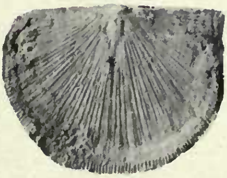
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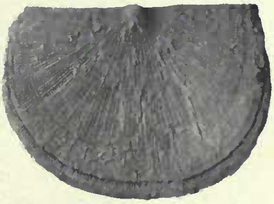
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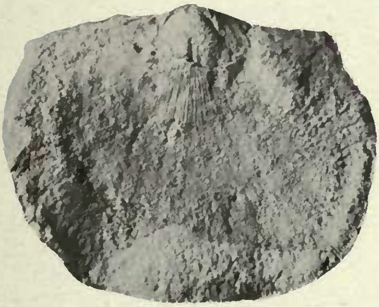
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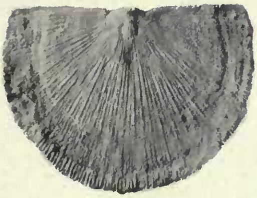
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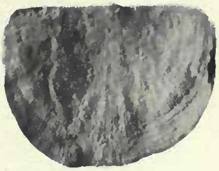
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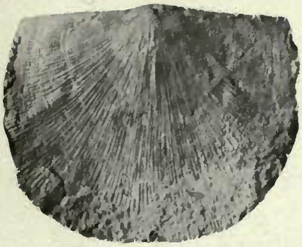
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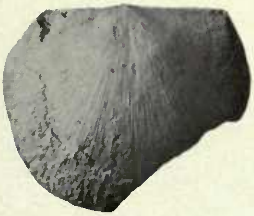
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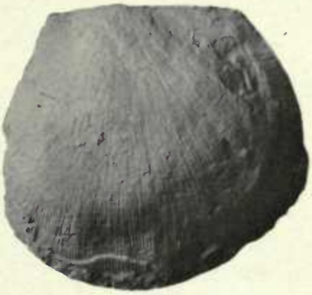
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EXPLANATION OF PLATE IV.

Figs. 1-2. SCHELLWIENELLA BURLINGTONENSIS n. sp....................p. 67

1. View of a large, partially exfoliated pedicle valve. 2. View of a smaller, somewhat crushed brachial valve. Cotypes. (W. M., No. 13354.)

Burlington limestone, Henderson County, Illinois.

Figs. 3-5. STREPTORHYNCHUS TENUICOSTATUM n. sp.....................p. 69

3-4. Pedicle and brachial views of a nearly complete example. 5. View of an exfoliated brachial valve. Cotypes. (W. M., No. 9665.)

Chouteau limestone, Chouteau Springs, Missouri.

Fig. 6. SCHELLWIENELLA ALTERNATA n. sp.............................p. 66

View of a nearly complete but somewhat exfoliated brachial valve, the holotype. (W. M., No. 13355.)

Burlington limestone, Burlington, Iowa.

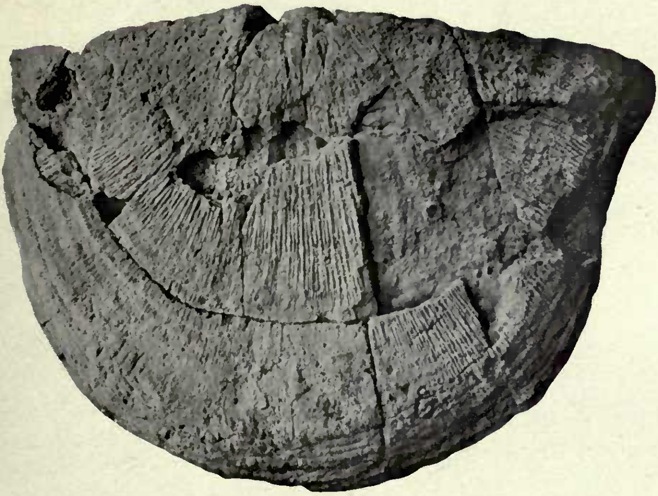
Figs. 7-12. SCHELLWIENELLA INFLATA (White & Whitfield)............p. 59

7-9. Pedicle, lateral and brachial views of a sulphur cast of one of the cotypes. (W. M., No. 14218.)

Kinderhook, Bed No. 6, Burlington, Iowa.

10. View of an internal cast of a nearly complete brachial valve. (W. M., No. 13355.) 11-12. Brachial and lateral views of a nearly complete internal cast of a brachial valve, one of the cotypes. (U. M., No. 1353.)

Kinderhook, Bed No. 7, Burlington, Iowa.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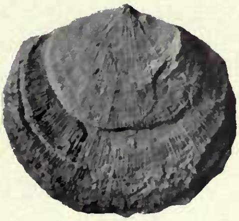
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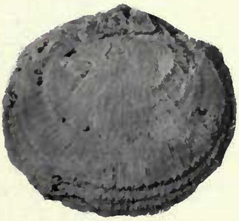
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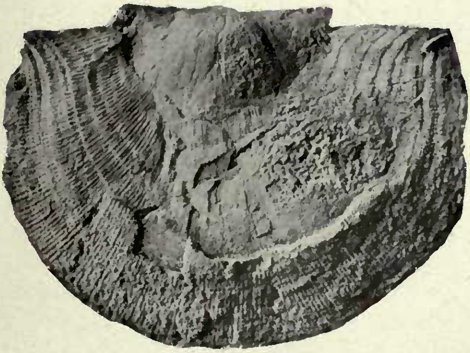
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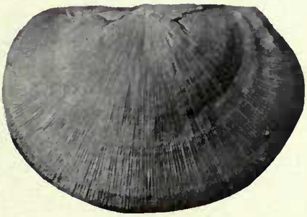
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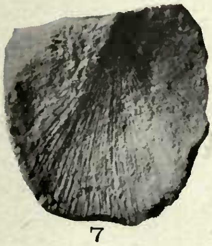
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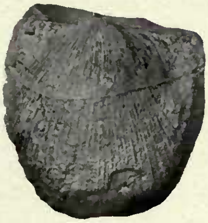
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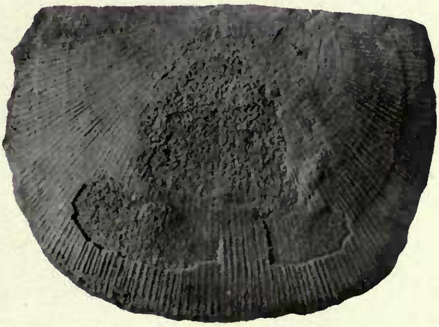
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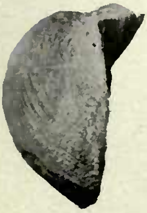
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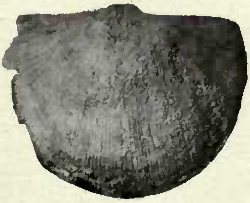
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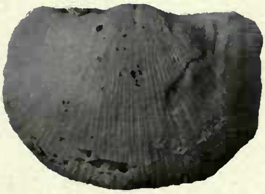
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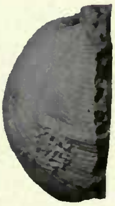
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EXPLANATION OF PLATE V.

Figs. 1-19. STREPTORHYNCHUS RUGINOSUM (Hall & Clarke)............p. 71

1-5. Pedicle, brachial, lateral, posterior, and anterior views of the holotype. (W. M., No. 11912.)
St. Louis chert, Providence, Indiana.

6-9. Pedicle, brachial, posterior, and lateral views of a nearly complete specimen. (W. M., No. 10129.)
St. Louis limestone, St. Louis, Missouri.

10-11. View of an internal cast, and a plaster cast of the natural mould of the exterior of the same specimen. One of the cotypes of *S. williamsi* Weller. (W. M., No. 4956.)
Batesville sandstone, Batesville, Arkansas.

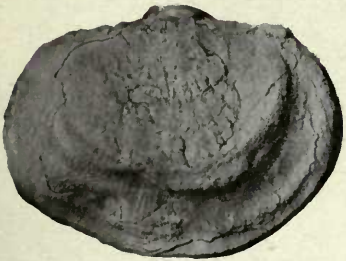
12. View of a pedicle valve. (W. M., No. 14759.)
St. Louis limestone, Alton, Illinois.

13. View of an internal cast of a nearly complete brachial valve. 14. View of an internal cast of a pedicle valve. (W. M., No. 14758.)
Salem limestone, Hull's Hollow, near Alton, Illinois.

15. View of the internal cast of a small pedicle valve. 16. View of the internal cast of a brachial valve. (W. M., No. 282.)
Residual chert, Springfield, Missouri.

17-18. Pedicle and brachial views of a nearly complete specimen. (W. M., No. 10922.)
St. Louis limestone, Alton, Illinois.

19. View of a nearly complete pedicle valve. (W. M., No. 10129.)
St. Louis limestone, St. Louis, Missouri.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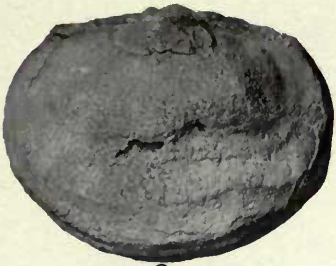
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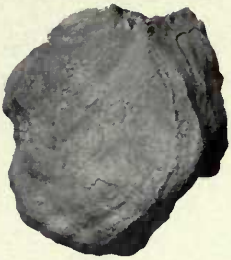
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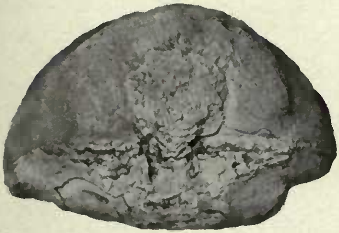
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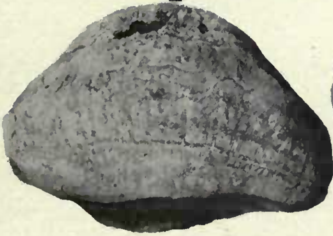
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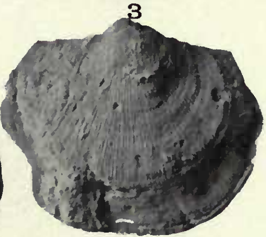
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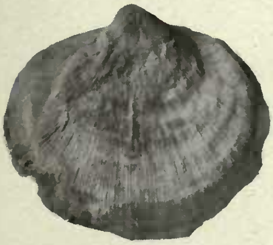
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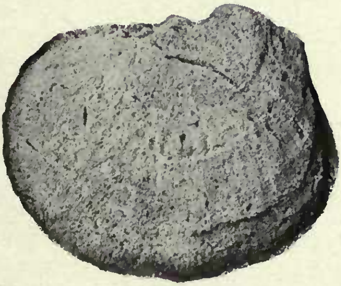
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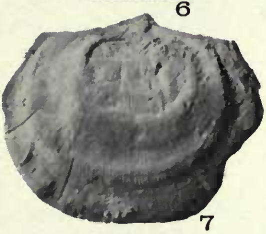
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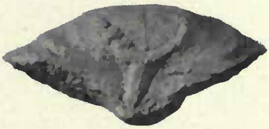
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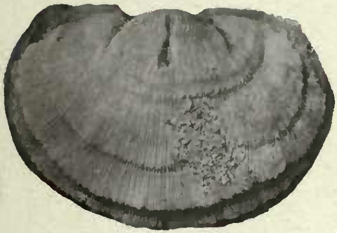
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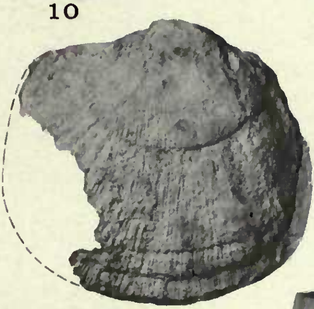
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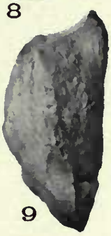
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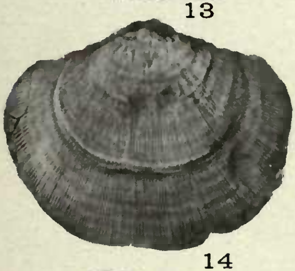
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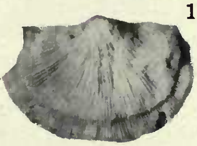
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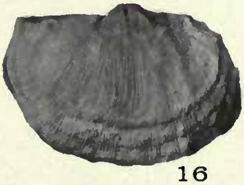
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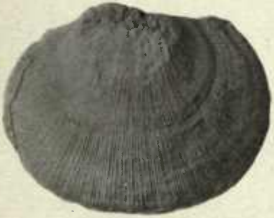
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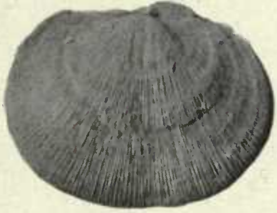
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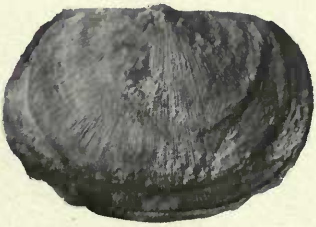
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EXPLANATION OF PLATE VI.

Figs. 1-14. Orthotetes kaskaskiensis McChesney....................p. 77

1-4. Pedicle, brachial, lateral and posterior views of a nearly complete specimen. 5-8. Pedicle, brachial, posterior and lateral views of a smaller example. (W. M., No. 10920.)

Pella beds, Pella, Iowa.

13-14. Pedicle and brachial views of a nearly complete example. (W. M., No. 8647.)

Chester group, Meade County, Kentucky.

9-12. Brachial, pedicle, posterior and lateral views of a nearly complete specimen. (W. M., No. 8648.)

Chester group, Randolph County, Illinois.

Fig. 15. Orthotetes kaskaskiensis McChesney (?)..................p. 77

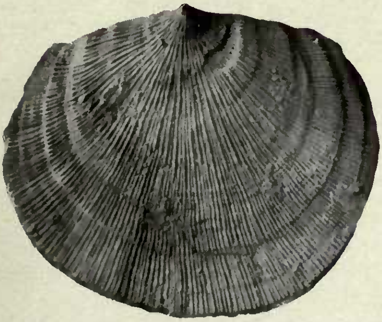
View of a nearly complete but exfoliated brachial valve which differs from the more typical representatives of the species in having much stronger costæ at regular intervals. (W. M., 14760.)

Chester group, Red Bud, Illinois.

Figs. 16-21. Streptorhynchus minutum Cumings....................p. 70

16-18. Pedicle, brachial and posterior views of a complete example (x4). 19-21. Similar views of another example (x4). (W. M.)

Salem limestone, Bloomington, Indiana.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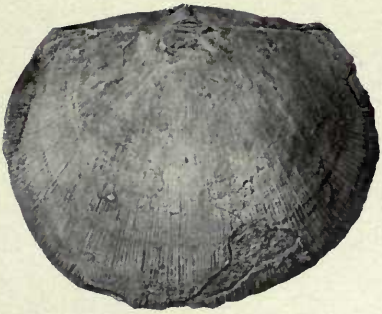
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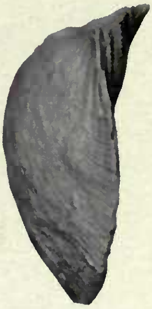
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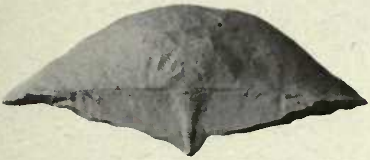
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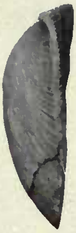
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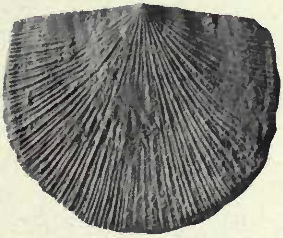
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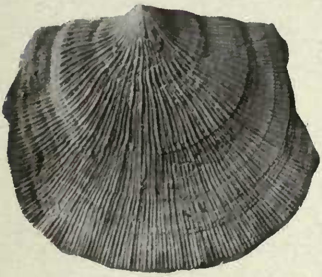
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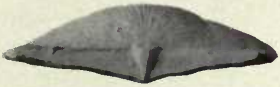
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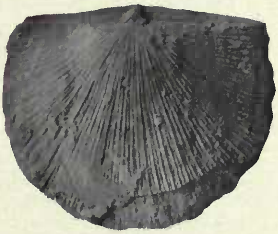
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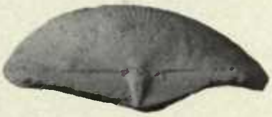
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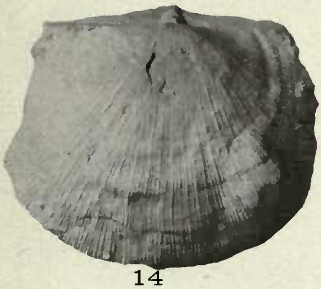
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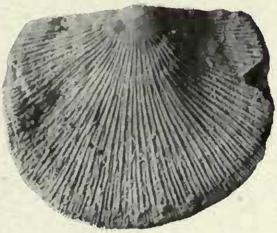
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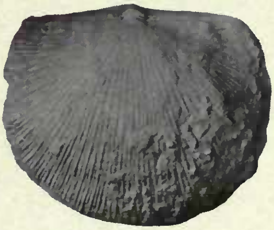
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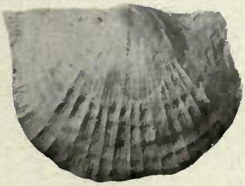
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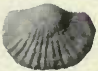
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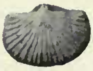
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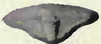
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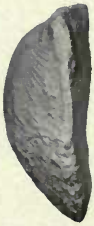
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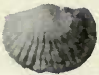
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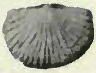
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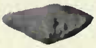
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EXPLANATION OF PLATE VII.

Figs. 1-4. ORTHOTETES KEOKUK Hall....................................p. 75

1-3. Pedicle, brachial and lateral views of a nearly complete but exfoliated specimen. (W. M., No. 8652.)

Keokuk limestone, Keokuk, Iowa.

4. View of an incomplete internal cast of a pedicle valve showing the median septum as a slit. (W. M., No. 363.)

Residual chert, Springfield, Missouri.

Figs. 5-8. SCHELLWIENELLA CHOUTEAUENSIS n. sp......................p. 64

5-6. Pedicle and brachial views of a nearly complete specimen.

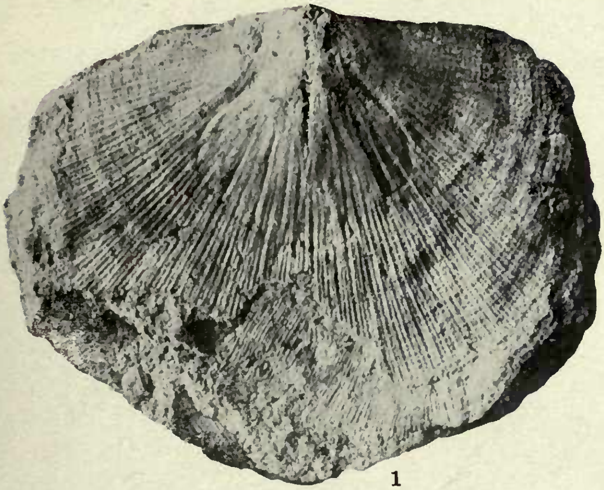
7-8. Brachial view of another less complete specimen. Cotypes. (W. M., No. 9856.)

Chouteau limestone, Pettis County, Missouri.

Figs. 9-10. SCHUCHERTELLA sp.

Views of two imperfect pedicle valves. (W. M., No. 11353.)

Glen Park limestone, Glen Park, Missouri.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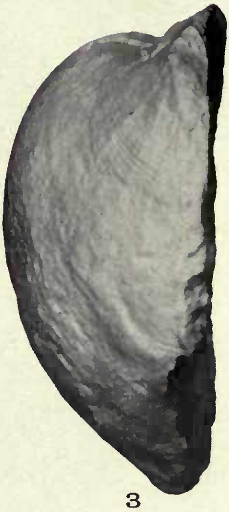
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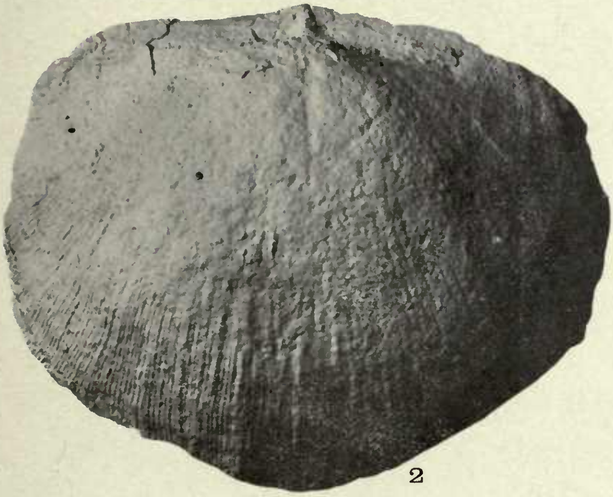
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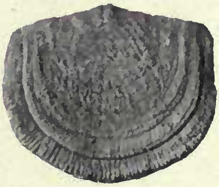
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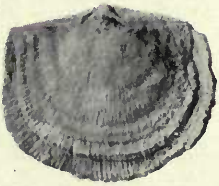
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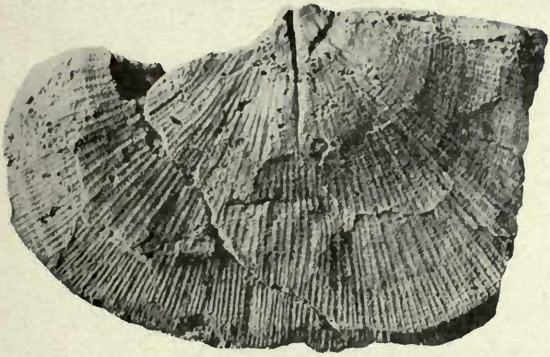
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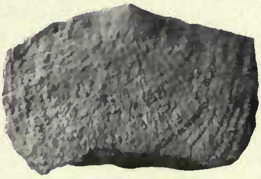
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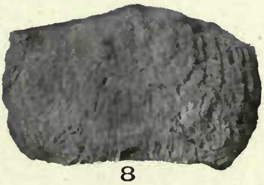
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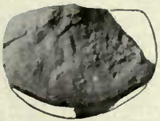
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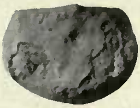
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EXPLANATION OF PLATE VIII.

Figs. 1-7. CHONETES SHUMARDANUS DeKoninck........................p. 89

1. Pedicle valve of a large individual. 2-3. Pedicle and brachial views of a specimen preserving both valves. 4-5. Pedicle and brachial views of another specimen preserving both valves. 6-7. Exterior and interior views of a pedicle valve. (W. M., No. 13940.)

New Providence shale, Button Mould Knob, Kentucky.

Figs. 8-16. CHONETES MULTICOSTA Winchell..........................p. 79

8-9. Pedicle and brachial views of a large example preserving both valves. (W. M., No. 4700.)

Fern Glen formation, Fern Glen, Missouri.

10-11. Views of two large pedicle valves. (W. M., No. 352.)

Burlington limestone, near Springfield, Missouri.

12. View of a pedicle valve, the principal one of Winchell's types. (U. M., No. 1343.)

Lower Burlington limestone (?), Burlington, Iowa.

13. View of a brachial valve, one of Winchell's types. (U. M., No. 1343.)

White chert, probably from the Lower Burlington limestone, Burlington, Iowa.

14-15. External impressions of two brachial valves. 16. An internal cast of a pedicle valve. (U. M., No. 1343.)

Kinderhook, bed No. 7, Burlington, Iowa.

Fig. 17. CHONETES sp.

The internal cast of a pedicle valve included among the types of *C. multicosta* Winchell. (U. M., No. 1343.)

Chonopectus sandstone, Burlington, Iowa.

Figs. 18-19. CHONETES BURLINGTONENSIS Weller......................p. 93

18. View of a pedicle valve, the holotype. (W. M., No. 6669.)
19. View of a brachial valve. (W. M., No. 13943.)

Kinderhook oolite, bed No. 6, Burlington, Iowa.

Fig. 20. CHONETES MISSOURIENSIS n. sp..............................p. 82

View of a large pedicle valve, the holotype. (W. M., No. 8560.)

Pierson limestone, near Springfield, Missouri.

Figs. 21-29. CHONETES ORNATUS Shumard.............................p. 86

21-24. Pedicle views of four nearly perfect individuals. 25-28. Brachial views of the same four individuals. 29. View of the interior of a brachial valve. (W. M., No. 6726.)

Louisiana limestone, Louisiana, Missouri.

Fig. 30. CHONETES GLENPARKENSIS Weller............................p. 87

View of a pedicle valve, the holotype. (W. M., No. 11355.)

Glen Park limestone, Glen Park, Missouri.

Figs. 31-34. CHONETES CHESTERENSIS n. sp. . . . . p. 83

33-34. Pedicle and brachial views of a nearly complete specimen. Cotype. (W. M., No. 7693.)

Chester group, Monroe County, Illinois.

31-32. Pedicle and brachial views of a nearly complete specimen. Cotype. (W. M., No. 14761.)

Chester group, St. Clair County, Illinois.

Figs. 35-42. CHONETES GENICULATUS White . . . . p. 92

35-38. Pedicle views of four nearly complete individuals. 39-42. Views of the same four individuals from the brachial side. (W. M., No. 6727.)

Louisiana limestone, Louisiana, Missouri.

Figs. 43-46. CHONETES LOGANI Norwood & Pratten . . . . p. 84

43-44. Views of two pedicle valves. 45-46. Views of two brachial valves. (W. M., No. 13941.)

Kinderhook oolite, bed No. 6, Burlington, Iowa.

Figs. 47-49. CHONETES GLENPARKENSIS Weller . . . . p. 87

Views of three pedicle valves. (W. M., No. 9721.)

Chouteau limestone, Pettis County, Missouri.

Figs. 50-55. CHONETES sp.

50-52. External views of three somewhat worn pedicle valves. 53. Exterior view of a brachial valve. 54-55. Internal views of two brachial valves. (W. M., No. 11354.)

Glen Park limestone, Glen Park, Missouri.

Figs. 56-57. CHONETES sp.

56. View of the impression of the exterior of a brachial valve. 57. View of a pedicle valve. (W. M., No. 13945.)

Kinderhook, bed No. 3, Burlington, Iowa.

Figs. 58-62. CHONETES PLANUMBONA Meek & Worthen . . . . p. 94

58-59. Pedicle and brachial views of a nearly perfect individual. 60-61. Similar views of a second example. 62. Brachial view of a third specimen. (W. M., No. 7684.)

Keokuk, Ste. Genevieve County, Missouri.

Figs. 63-70. CHONETES ILLINOISENSIS Worthen . . . . p. 81

63. Pedicle view of a nearly perfect valve. 64. View of a group of shells, one of which is illustrated separately as fig. 63. (W. M., No. 14380.)

Burlington limestone, Booneville, Missouri.

65. Pedicle view. 66. Brachial view. 67. View of the interior of a brachial valve. (W. M., No. 2968.)

Burlington limestone, Springfield, Missouri.

68. Pedicle view. 69. Brachial view. 70. View of the interior of a brachial valve. (W. M., No. 2969.)

Keokuk limestone, near Springfield, Missouri.

Figs. 71-72. CHONETES GREGARIUS Weller . . . . p. 91

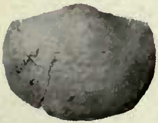
Views of two pedicle valves. (W. M., No. 13944.)

Kinderhook, bed No. 3, Burlington, Iowa.

Fig. 73. CHONOPECTUS FISCHERI Norwood & Pratten . . . . p. 96

View of a very perfect pedicle valve. (W. M., No. 6657.)

Kinderhook, bed No. 3, Burlington, Iowa.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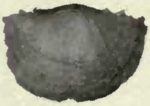
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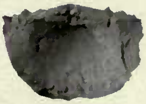
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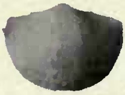
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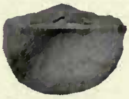
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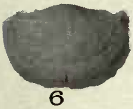
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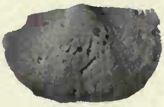
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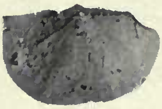
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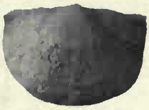
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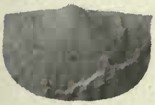
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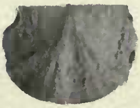
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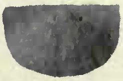
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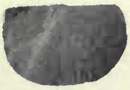
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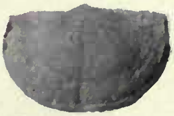
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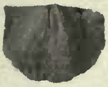
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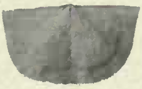
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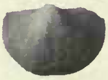
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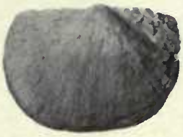
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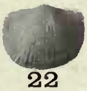
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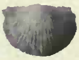
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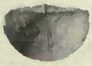
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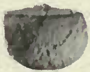
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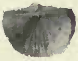
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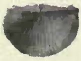
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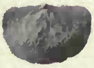
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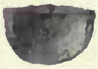
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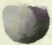
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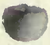
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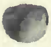
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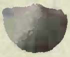
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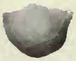
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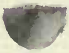
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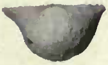
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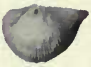
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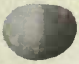
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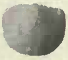
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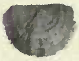
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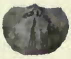
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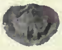
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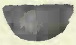
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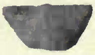
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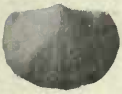
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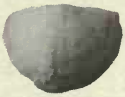
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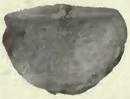
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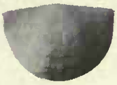
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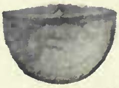
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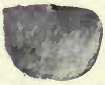
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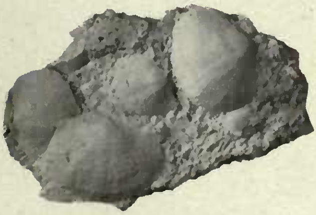
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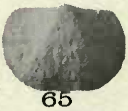
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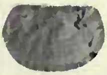
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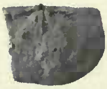
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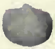
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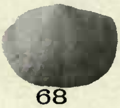
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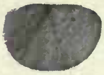
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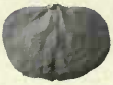
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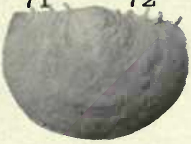
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EXPLANATION OF PLATE IX.

Figs. 1-10. **Productus burlingtonensis** Hall........................p. 104

1-3. Pedicle, posterior and lateral views of a pedicle valve. 4-5. Pedicle and posterior views of another pedicle valve. (W. M., No. 14303.) 6-8. Pedicle lateral and posterior views of a nearly perfect pedicle valve. (W. M., No. 14287.)

Burlington limestone, Burlington, Iowa.

9. View of a somewhat imperfect specimen of the interior of a brachial valve. (W. M., No. 345.)

Burlington limestone, Springfield, Missouri.

10. View of a nearly complete specimen from the brachial side, showing the concave brachial valve. (W. M., No. 14288.)

Burlington limestone, Quincy, Illinois.

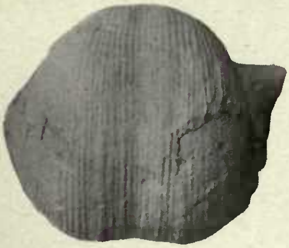
Figs. 11-17. **Productus fernglenensis** Weller........................p. 105

11-13. Pedicle, posterior and lateral views of a nearly complete pedicle valve. 14. View of another pedicle valve. 15. View of a large pedicle valve. 16. View of a brachial valve from the interior, showing the cardinal process; over the greater portion of the specimen the shell substance has been destroyed so that an impression of the exterior of the valve is exposed. Cotypes. (W. M., No. 4669.)

Fern Glen formation, near Kimmswick, Missouri.

17. View of a pedicle valve. (W. M., No. 8556.)

Pierson limestone, near Springfield, Missouri.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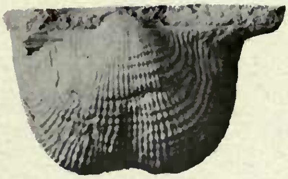
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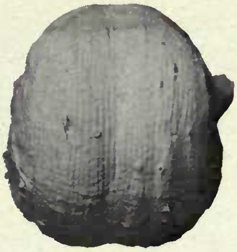
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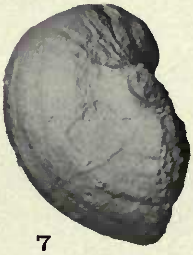
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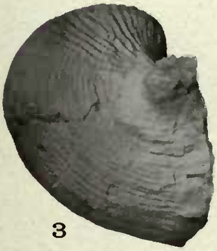
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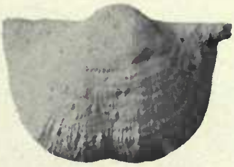
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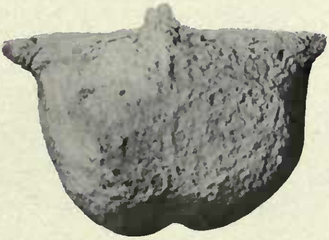
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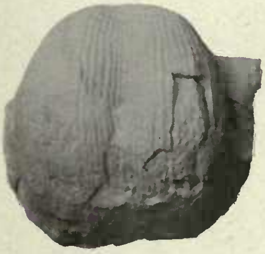
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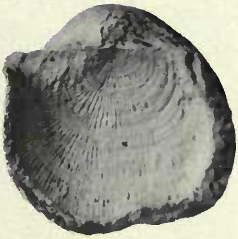
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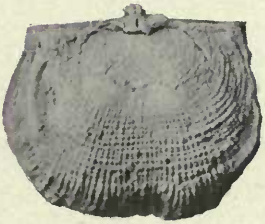
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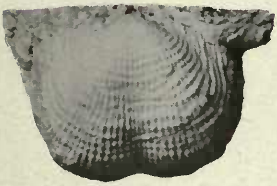
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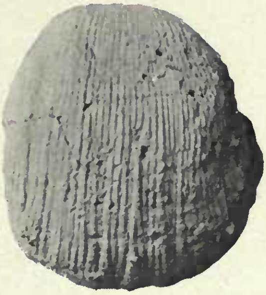
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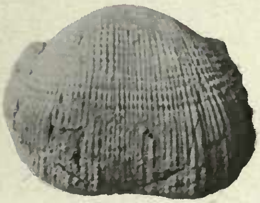
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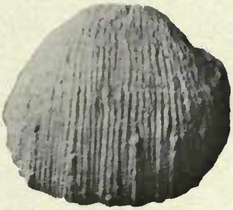
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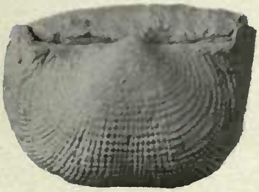
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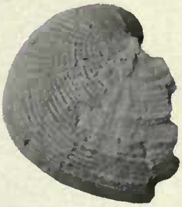
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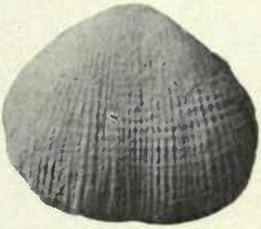
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EXPLANATION OF PLATE X.

Figs. 1-6. PRODUCTUS INFLATUS McChesney..........................p. 111

1-3. Pedicle, posterior and lateral views of a nearly perfect pedicle valve. (W. M., No. 14762.)

Chester group, Red Bud, Illinois.

4-6. Pedicle, posterior and lateral views of a nearly perfect pedicle valve. (W. M., No. 14304.)

Chester group, Meade County, Kentucky.

Figs. 7-13. PRODUCTUS MESIALIS Hall..................................p. 112

7-9. Pedicle, posterior and lateral views of a pedicle valve. 10-12. Similar views of another example. 13. View of a natural impression of a brachial valve. (W. M., No. 14329.)

Chert from Keokuk (?), Pierce City, Missouri.

Figs. 14-24. PRODUCTUS ALTONENSIS Norwood & Pratten.............p. 124

14. Posterior view of a pedicle valve. (W. M., No. 14295.)

Salem limestone, Spergen Hill, Indiana.

15. Brachial view of a nearly complete shell. 16-18. Posterior, brachial and lateral views of a nearly complete shell. (W. M., No. 14305.)

Salem limestone, Harrison County, Indiana.

19-21. Pedicle, posterior and lateral views of a nearly complete pedicle valve. (W. M., No. 3142.)

Salem limestone, Washington County, Indiana.

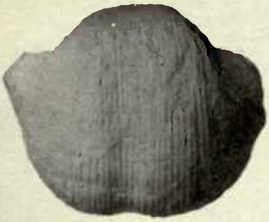
22-24. Pedicle, posterior and lateral views of a nearly complete pedicle valve. (W. M., No. 14296.)

Salem limestone, Spergen Hill, Indiana.

Figs. 25-27. PRODUCTUS TENUICOSTUS Hall...........................p. 119

Pedicle, brachial and lateral views of a nearly complete internal cast of a pedicle valve which probably belongs to this species. (W. M., No. 279.)

Residual chert, Springfield, Missouri.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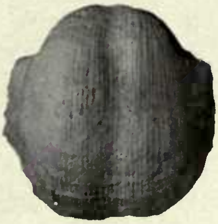
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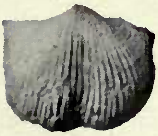
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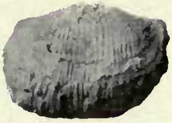
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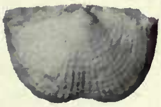
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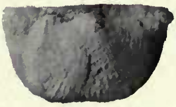
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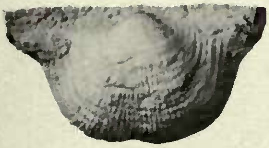
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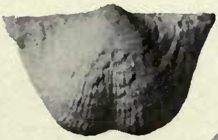
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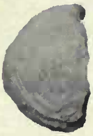
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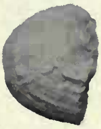
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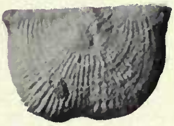
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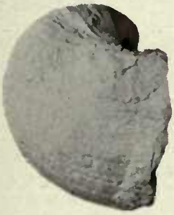
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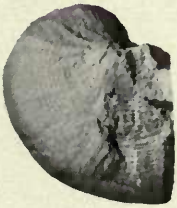
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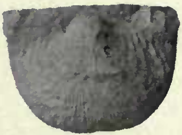
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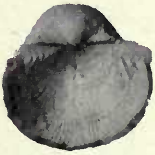
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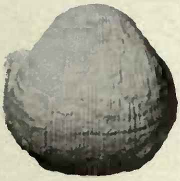
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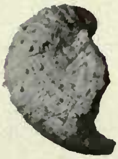
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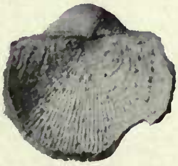
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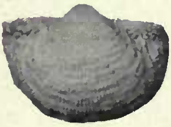
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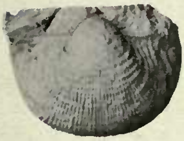
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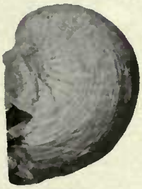
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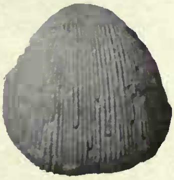
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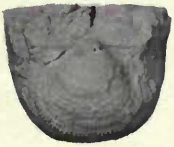
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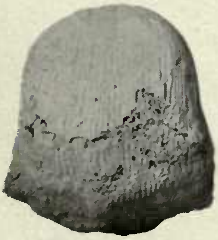
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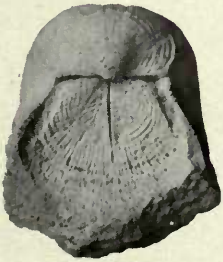
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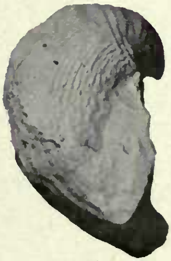
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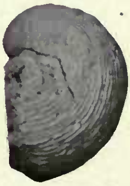
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EXPLANATION OF PLATE XI.

Figs. 1-5. Productus tenuicostus Hall..............................p. 119

1-3. Pedicle, lateral and posterior views of a good pedicle valve. (W. M., No. 14283.)

St. Louis limestone, Alton, Illinois.

4-5. Pedicle and lateral views of another pedicle valve. (W. M., No. 14284.)

St. Louis limestone, Milan, Illinois.

Figs. 6-11. Productus viminalis White..............................p. 114

6. Pedicle view of the holotype, a somewhat crushed pedicle valve. 9-10. Pedicle and lateral views of a large pedicle valve, an authentic specimen associated with the holotype in the White Collection at the University of Michigan. (U. M., No. 1693.)

Burlington limestone, Burlington, Iowa.

9-10. Pedicle and lateral views of a nearly perfect and undistorted pedicle valve. (W. M., No. 14291.)

Burlington limestone, Quincy, Illinois.

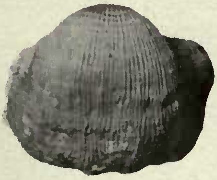
11. View of a natural mould of the external surface of the brachial valve, with a portion of the valve, including the cardinal process, adhering posteriorly. (W. M., No. 7925.)

Burlington limestone, Springfield, Missouri.

Figs. 12-16. Productus mesicostalis n. sp............................p. 114

12. View of a pedicle valve. 13-15. Pedicle, posterior and lateral views of a pedicle valve. 16. Interior view of a brachial valve. (W M., No. 10585.)

English River grit, Maple Mill, Washington County, Iowa.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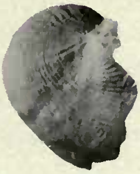
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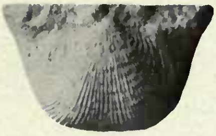
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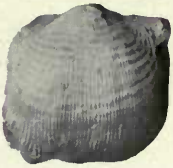
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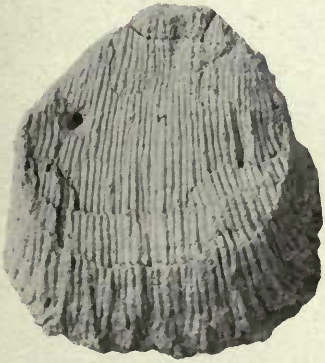
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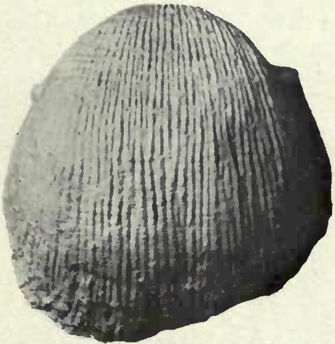
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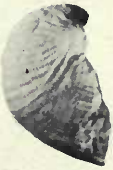
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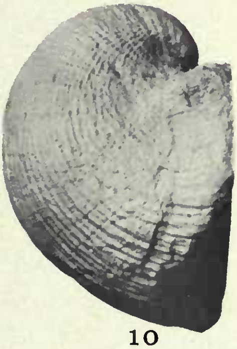
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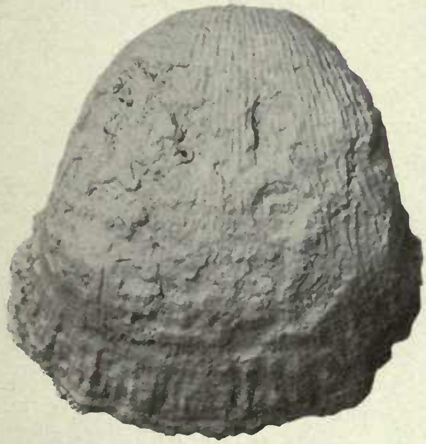
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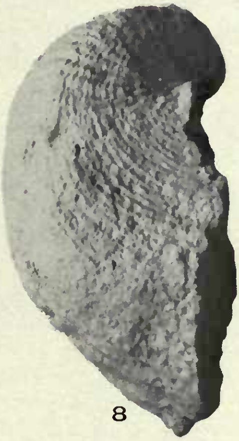
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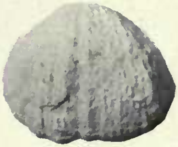
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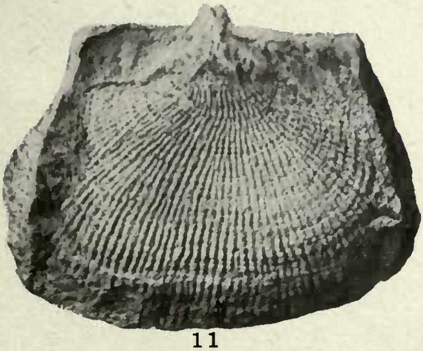
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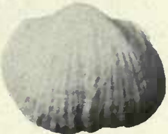
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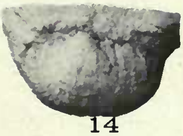
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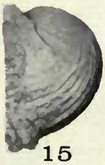
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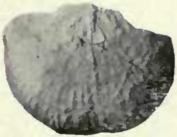
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EXPLANATION OF PLATE XIII.

Figs. 1-12. Productus arcuatus Hall .... p. 107

1-3. Pedicle, lateral and posterior views of a very perfect pedicle valve. 4-5. Pedicle and lateral views of a natural mould of the concave brachial valve. (W. M., No. 9823.)

Chouteau limestone, Chouteau Springs, Missouri.

6-8. Pedicle, lateral and posterior views of a very perfect pedicle valve. (W. M., No. 14285.) 9-10. Pedicle and lateral views of a nearly complete specimen. 11-12. Pedicle and lateral views of the natural mould of the concave brachial valve of the same shell. (W. M., No. 14330.)

Kinderhook oolite, bed No. 6, Burlington, Iowa.

Figs. 13-17. Productus wortheni Hall .... p. 126

13-15. Pedicle, lateral and posterior views of a nearly perfect pedicle valve. 16. Pedicle view of a natural mould of the external surface of a brachial valve. (W. M., No. 281.)

Residual chert, Springfield, Missouri.

17. Pedicle view of a nearly complete natural mould of the external surface of a brachial valve. (W. M., No. 294.)

Keokuk limestone, near Springfield, Missouri.

Figs. 18-23. Productus marginicinctus Prout .... p. 127

18-19. Pedicle and brachial views of a nearly complete example. 20-21. Pedicle and lateral views of a nearly complete pedicle valve. (W. M., No. 10846.) 22-23. Pedicle and lateral views of another nearly complete pedicle valve. (W. M., No. 14290.)

St. Louis limestone, St. Louis, Missouri.

Figs. 24-29. Productus scitulus Meek & Worthen .... p. 120

24-26. Pedicle, lateral and posterior views of a nearly complete pedicle valve. (W. M., No. 13128.)

St. Louis limestone, St. Louis, Missouri.

27-28. Views of two nearly perfect internal casts of pedicle valves. 29. View of the impression of the exterior of a brachial valve. (W. M., No. 14764.)

St. Louis limestone (chert), Fountain Creek, Monroe County, Illinois.

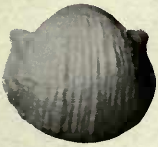
Figs. 30-35. Productus sampsoni Weller .... p. 129

30-33. Pedicle, brachial, lateral and posterior views of a nearly perfect shell. The holotype. (W. M., No. 9695.)

Chouteau limestone, Pettis County, Missouri.

34-35. Views of two larger pedicle valves. (W. M., No. 4698.)

Fern Glen formation, near Kimmswick, Missouri.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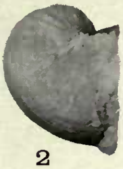
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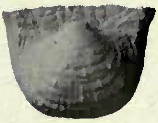
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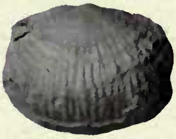
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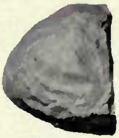
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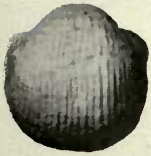
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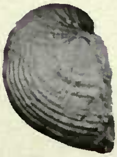
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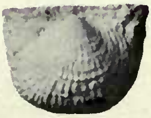
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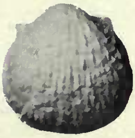

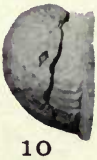
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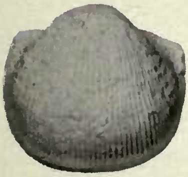
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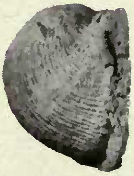
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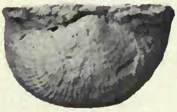
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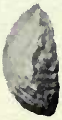
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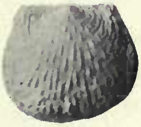
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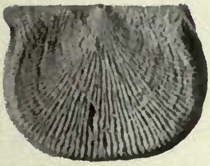
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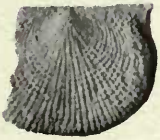
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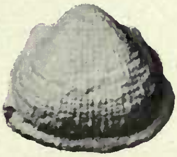
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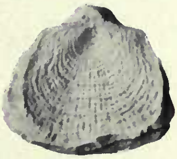
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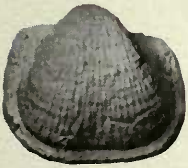
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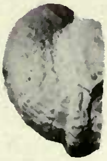
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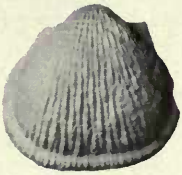
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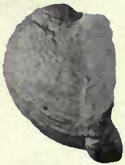
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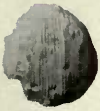
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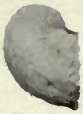
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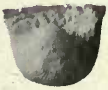
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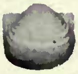
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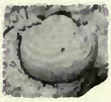
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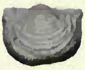
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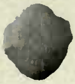
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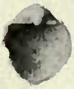
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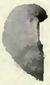
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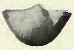
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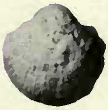
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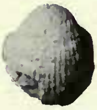
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EXPLANATION OF PLATE XIV.

Figs. 1-7. **Productus sedaliensis** n. sp.................................p. 108

1-2. Pedicle and lateral views of a large specimen. 3-5. Pedicle, lateral and posterior views of another smaller specimen. 6-7. Pedicle and lateral views of a natural mould of the exterior of a brachial valve. (W. M., No. 9691.)

Chouteau limestone, Pettis County, Missouri.

Figs. 8-13. **Productus curtirostris** Winchell.........................p. 130

8-9. Lateral and pedicle views of a pedicle valve. 10-11. Posterior and pedicle views of another pedicle valve. Cotypes. (U. M., No. 1337.)

Chonopectus sandstone, Burlington, Iowa.

12-13. Views of two pedicle valves. In fig. 13 the material has been broken away in such a manner as to exhibit the impression of the brachial valve. (W. M., No. 10576.)

English River grit, Maple Mill, Washington County, Iowa.

Figs. 14-21. **Productus blairi** Miller..................................p. 110

14-16. Pedicle, brachial and lateral views of a nearly complete specimen. 17-19. Similar views of another example. (W. M., No. 9824.)

Chouteau limestone, Chouteau Springs, Missouri.

20-21. Pedicle views of the natural moulds of two brachial valves. (W. M., No. 9692.)

Chouteau limestone, Pettis County, Missouri.

Figs. 22-23. **Productus** sp.

Pedicle and brachial views of a nearly complete shell. (W. M., No. 9825.)

Chouteau limestone, Chouteau Springs, Missouri.

Figs. 24-25. **Productus parvulus** Winchell.........................p. 128

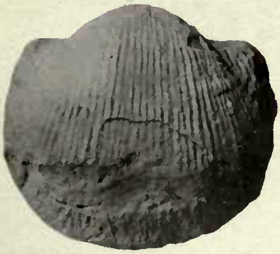
Views of two pedicle valves. Cotypes. (U. M., No. 1338.)

Kinderhook, bed No. 5, Burlington, Iowa.

Figs. 26-27. **Productus** sp.

Pedicle and lateral views of a nearly complete pedicle valve. (D. K. G., No. 2101.)

Burlington limestone, Louisiana, Missouri.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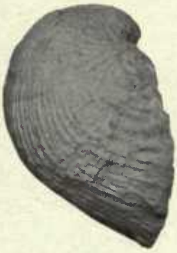
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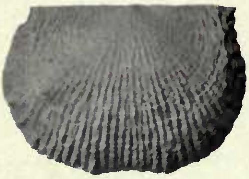
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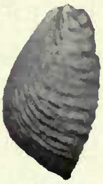
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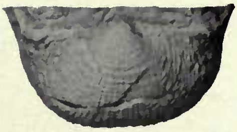
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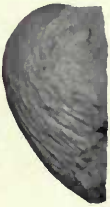
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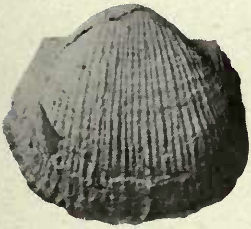
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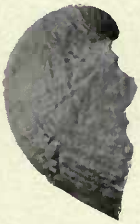
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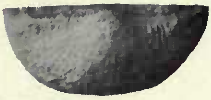
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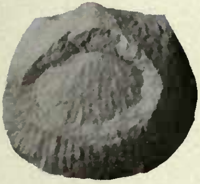
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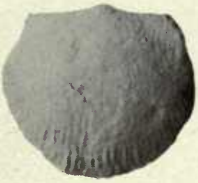
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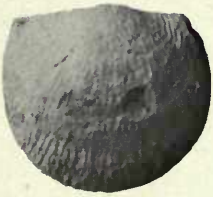
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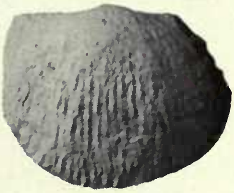
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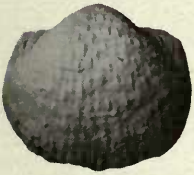
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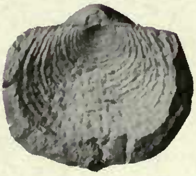
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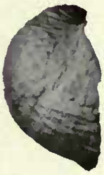
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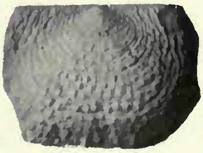
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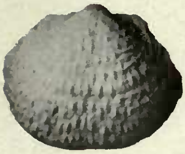
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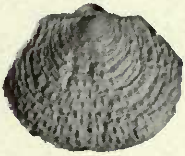
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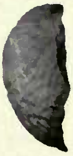
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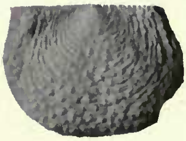
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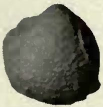
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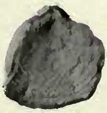
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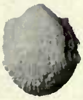
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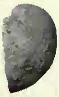
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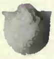
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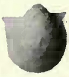
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EXPLANATION OF PLATE XV.

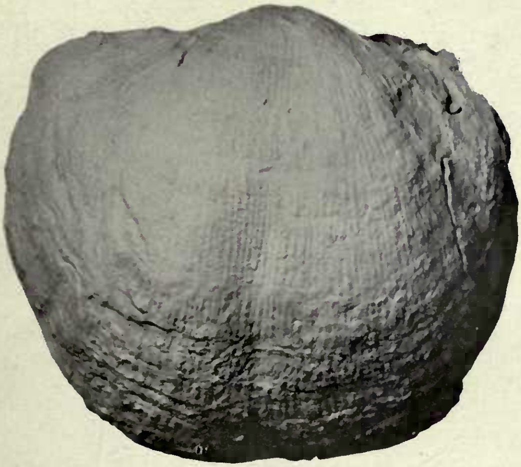
Figs. 1-8. Productus magnus Meek & Worthen......................p. 117

1-3. Pedicle, lateral and posterior views of a nearly complete pedicle valve. 4. View of a natural mould of the exterior of brachial valve. (W. M., No. 14321.) 5. Posterior view of another example showing the arrangement of spine bases along the cardinal margin. (W. M., No. 14765.)

Keokuk, Monroe County, Illinois.

6-8. Pedicle, lateral and posterior views of a smaller example, having the characters of the shell described as *P. fentonensis* by Shumard. (W. M., No. 14308.)

Keokuk, Fenton, St. Louis County, Missouri.



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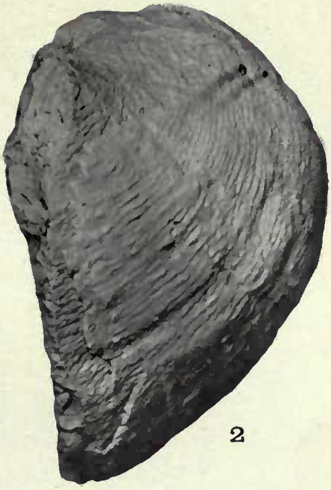

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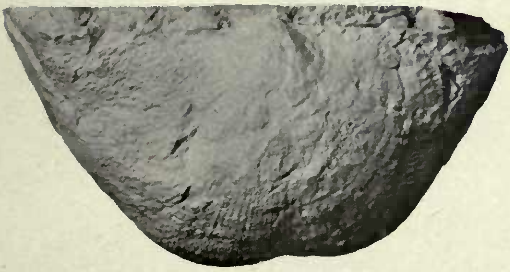

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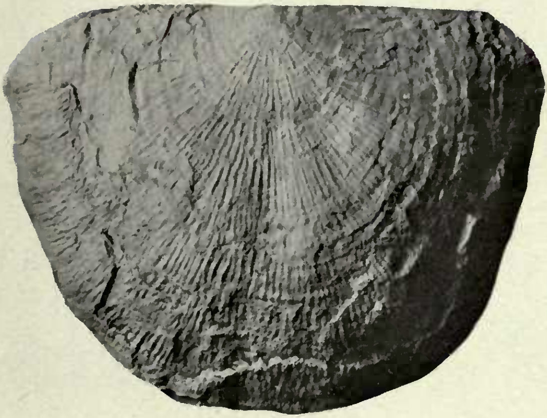

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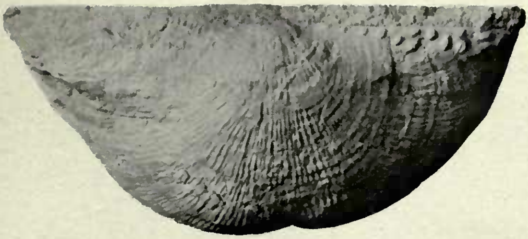

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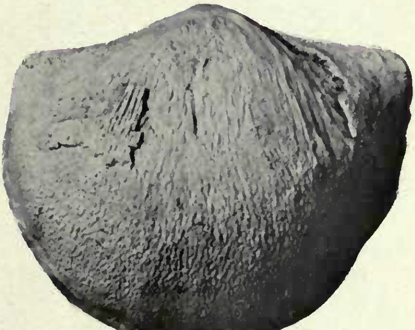

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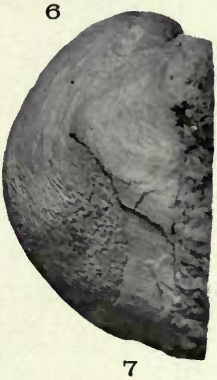

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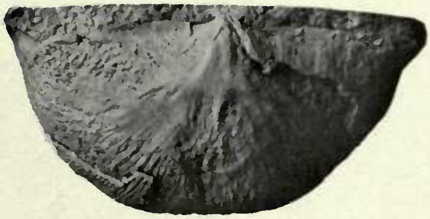

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EXPLANATION OF PLATE XVI.

Figs. 1-15. Productus ovatus Hall.................................p. 132

1-3. Pedicle, lateral and posterior views of a nearly complete pedicle valve. *(Productus pileiformis.)* (W. M., No. 14323.)
Chester group, Chester, Illinois.

4-5. Pedicle and lateral views of a pedicle valve. 6-7. Direct and profile views of the external impression of a brachial valve. *(Productus pileiformis.)* (W. M., No. 14314.)
Chester group, Meade County, Kentucky.

8-9. Pedicle and lateral views of a nearly complete pedicle valve. (W. M., No. 326.)
Keokuk limestone, near Springfield, Missouri.

10-11. Pedicle and lateral views of a nearly complete pedicle valve. (W. M., No. 10130.)
St. Louis limestone, St. Louis, Missouri.

12. Direct view of an incomplete pedicle valve. *(Productus lævicostus* White.*)* (W. M., No. 6714.)
Kinderhook, bed No. 7, Burlington, Iowa.

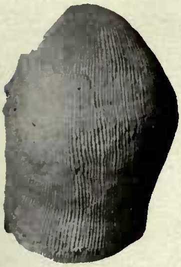
13. Direct view of a pedicle valve. *(Productus lævicostus* White) (W. M., No. 5924.)
Chonopectus limestone, Burlington, Iowa.

14-15. Brachial and pedicle views of an incomplete specimen preserving both valves. *(Productus lævicostus* White) (W. M., No. 296.)
Lower Burlington limestone, near Springfield, Missouri.

Figs. 16-22. Productus parvus (Meek and Worthen)...............p. 121

16-19. Pedicle, brachial, lateral and posterior views of a very perfect shell. (W. M., No. 9915.)
Chester group, Chester, Illinois.

20-22. Posterior, lateral and pedicle views of another perfect specimen. (W. M., No. 10923.)
Pella beds, Pella, Iowa.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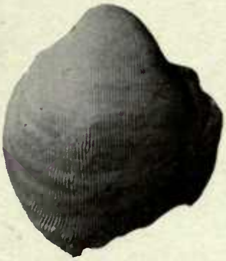
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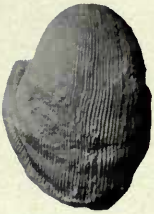
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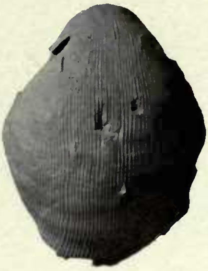
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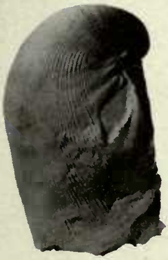
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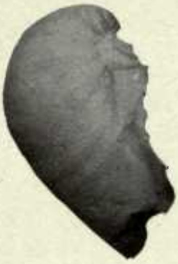
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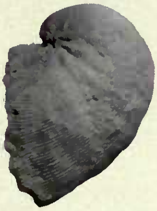
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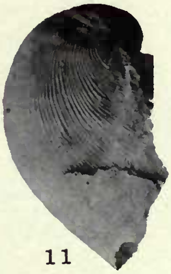
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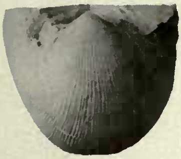
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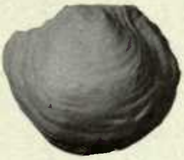
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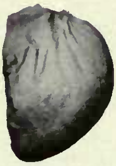
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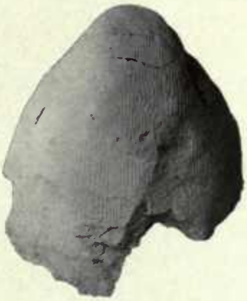
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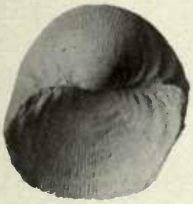
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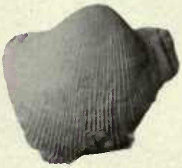
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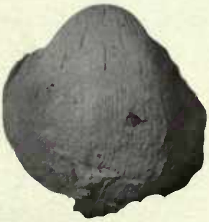
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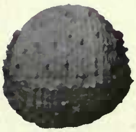
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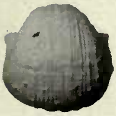
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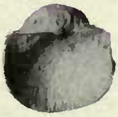
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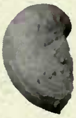
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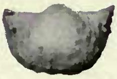
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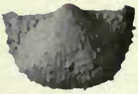
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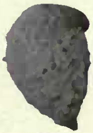
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EXPLANATION OF PLATE XVI.

Figs. 1-15. PRODUCTUS OVATUS Hall....................................p. 132

1-3. Pedicle, lateral and posterior views of a nearly complete pedicle valve. *(Productus pileiformis.)* (W. M., No. 14323.)
Chester group, Chester, Illinois.

4-5. Pedicle and lateral views of a pedicle valve. 6-7. Direct and profile views of the external impression of a brachial valve. *(Productus pileiformis.)* (W. M., No. 14314.)
Chester group, Meade County, Kentucky.

8-9. Pedicle and lateral views of a nearly complete pedicle valve. (W. M., No. 326.)
Keokuk limestone, near Springfield, Missouri.

10-11. Pedicle and lateral views of a nearly complete pedicle valve. (W. M., No. 10130.)
St. Louis limestone, St. Louis, Missouri.

12. Direct view of an incomplete pedicle valve. *(Productus lævicostus* White.*)* (W. M., No. 6714.)
Kinderhook, bed No. 7, Burlington, Iowa.

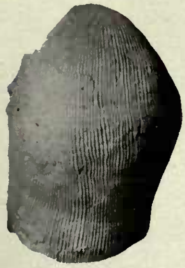
13. Direct view of a pedicle valve. *(Productus lævicostus* White) (W. M., No. 5924.)
Chonopectus limestone, Burlington, Iowa.

14-15. Brachial and pedicle views of an incomplete specimen preserving both valves. *(Productus lævicostus* White) (W. M., No. 296.)
Lower Burlington limestone, near Springfield, Missouri.

Figs. 16-22. PRODUCTUS PARVUS (Meek and Worthen)................p. 121

16-19. Pedicle, brachial, lateral and posterior views of a very perfect shell. (W. M., No. 9915.)
Chester group, Chester, Illinois.

20-22. Posterior, lateral and pedicle views of another perfect specimen. (W. M., No. 10923.)
Pella beds, Pella, Iowa.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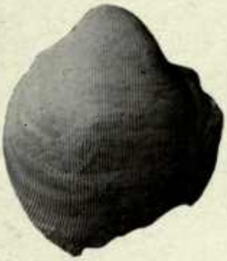
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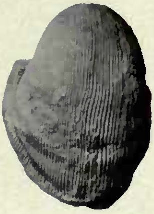
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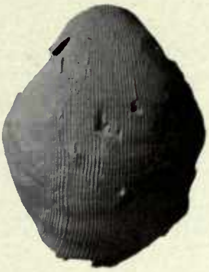
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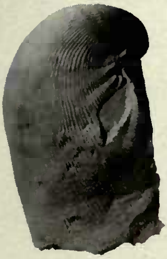
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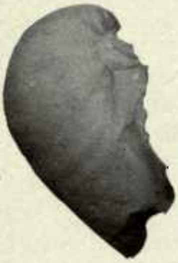
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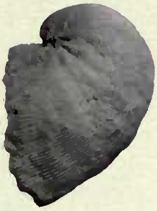
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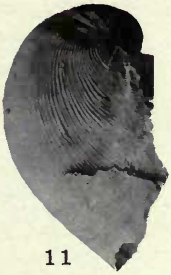
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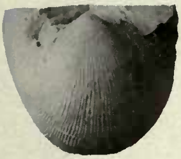
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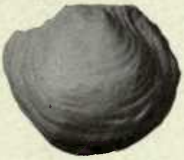
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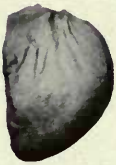
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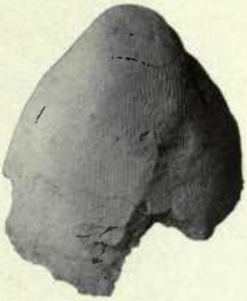
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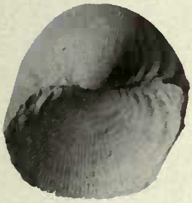
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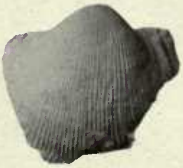
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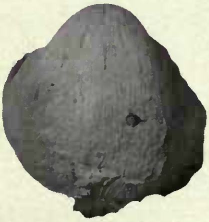
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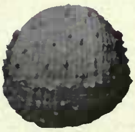
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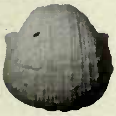
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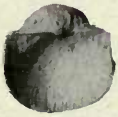
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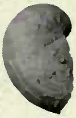
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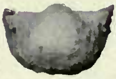
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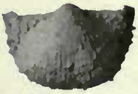
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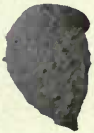
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EXPLANATION OF PLATE XVII.

Figs. 1-7. Echinoconchus alternatus (Norwood and Pratten) ...... p. 138

1-4. Pedicle, brachial, lateral and posterior views of a nearly complete shell without the surface spines. (W. M., No. 14318.)
Keokuk limestone, Warsaw, Illinois.

5. View of the interior of a nearly complete brachial valve. (W. M., No. 14316.)
Crawfordsville shale, Crawfordsville, Indiana.

6-7. Lateral and pedicle views of a pedicle valve from which the spines are missing. (W. M., No. 14319.)
Keokuk limestone, Warsaw, Illinois.

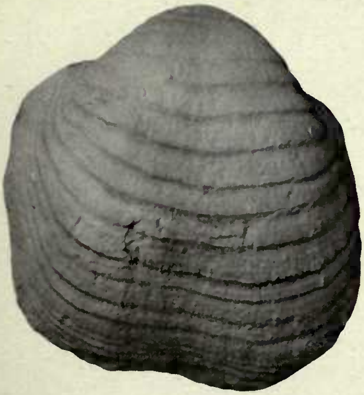
Figs. 8-9. Echinoconchus sp.

Lateral and pedicle views of a large and nearly complete pedicle valve lacking the spines. (W. M., No. 12988.)
St. Louis limestone, Carondelet, Missouri.

Figs. 10-15. Echinoconchus biseriatus (Hall) .... p. 141

10-13. Pedicle, brachial, lateral and posterior views of a nearly perfect specimen, lacking the spines. (W. M., No. 14315.)
Salem limestone, Spergen Hill, Indiana.

14. The impression of the external surface of a brachial valve.
15. View of the interior of a brachial valve. (W. M., No. 14766.)
Salem limestone, Hull's Hollow, near Alton, Illinois.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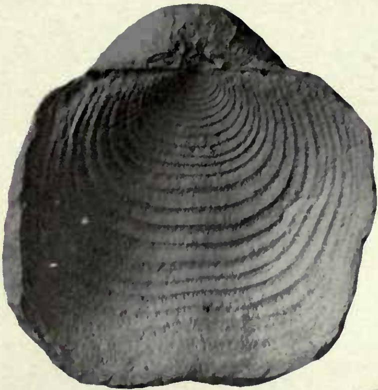
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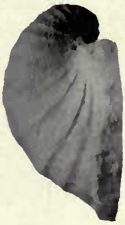
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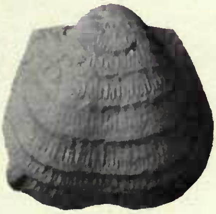
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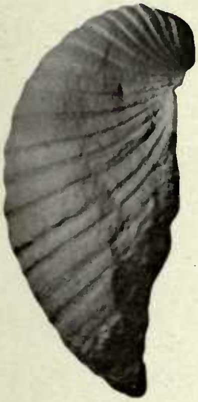
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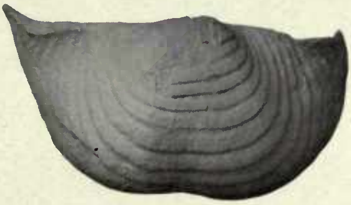
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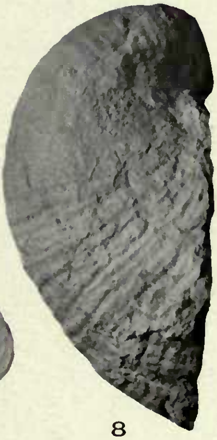
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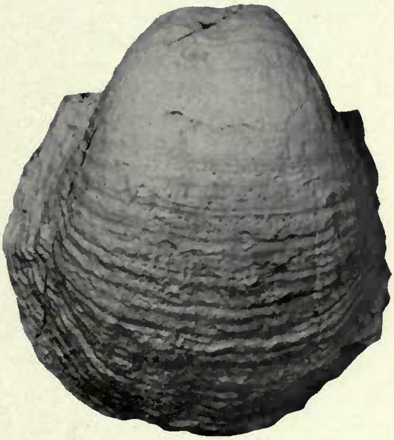
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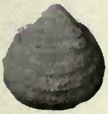
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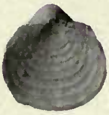
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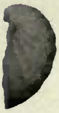
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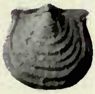
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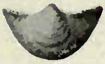
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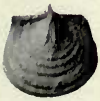
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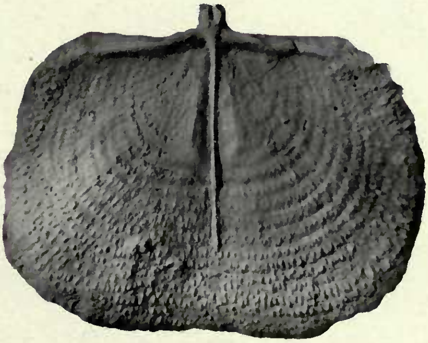
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EXPLANATION OF PLATE XVIII.

Figs. 1-6. ECHINOCONCHUS GENEVIEVENSIS n. sp......................p. 139

1-2. Pedicle and posterior views of a pedicle valve. 3-4. Pedicle and lateral views of another specimen. (W. M., No. 14767.)

Ste. Genevieve limestone, 2 mi. N. E. Columbia, Illinois.

5. The impression of the external surface of a brachial valve. 6. View of a small pedicle valve. (W. M., No. 14768.)

Ste. Genevieve limestone, Columbia, Illinois.

Figs. 7-10. PRODUCTUS INDIANENSIS Hall..............................p. 131

7-8. Views of two brachial valves, natural size. 9-10. Pedicle and lateral views of the specimen illustrated in Fig. 7 (x 4). (W. M., No. 14325.)

Salem limestone, Spergen Hill, Indiana.

Figs. 11-12. PRODUCTUS sp.

External and internal views of a free brachial valve. (W. M., No. 7864.)

Salem limestone (?), Jersey County, Illinois.

Figs. 13-15. ECHINOCONCHUS MORBILLIANUS (Winchell).............p. 142

Pedicle, lateral and posterior views of the holotype. (U. M., No. 2002.)

Base of Burlington limestone, Burlington, Iowa.

Fig. 16. PRODUCTUS sp.

One of the specimens associated with the type of *Echinoconchus morbillianus* by Winchell, but clearly not a member of the same species. (U. M., No. 2003.)

Chonopectus limestone, Burlington, Iowa.

Figs. 17-18. STROPHALOSIA KEOKUK Beecher..........................p. 145

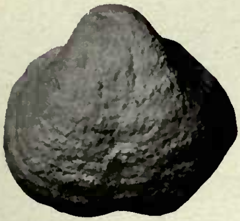
A specimen of usual size attached to a shell of *Platyceras.* 18. The same (x 4). (W. M., No. 13008.)

Keokuk limestone, Crawfordsville, Indiana.

Figs. 19-23. STROPHALOSIA SCINTILLA Beecher.........................p. 144

19-20. Specimens of usual size attached to the shells of *Productella pyxidata.* (W. M., No. 6701.) 21. Another similar specimen. (W. M., No. 13048.) 22. An enlargement of Fig. 20 to x 4. 23. A similar enlargement of Fig. 21 to x 4.

Louisiana limestone, Louisiana, Missouri.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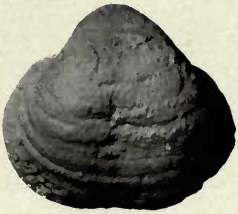
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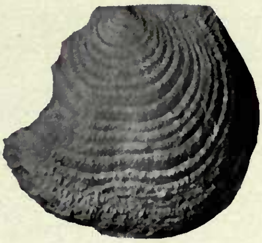
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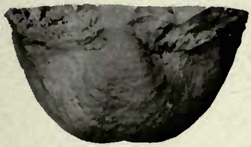
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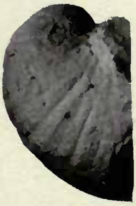
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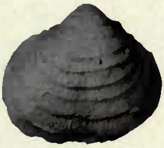
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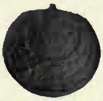
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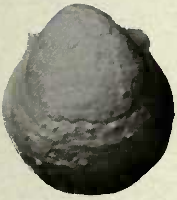
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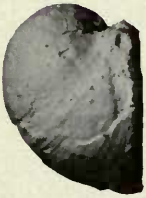
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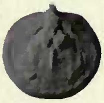
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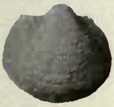
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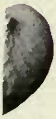
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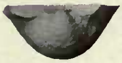
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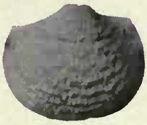
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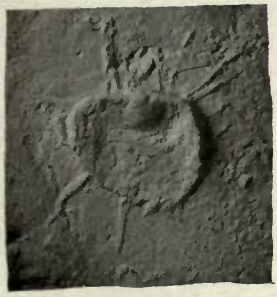
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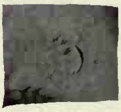
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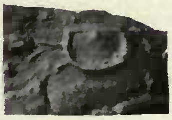
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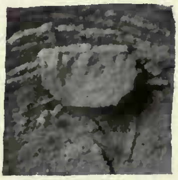
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EXPLANATION OF PLATE XIX.

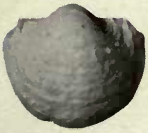
Figs. 1-21. Productella pyxidata Hall..............................p. 100
1-14. Pedicle and brachial views of seven nearly perfect shells. 15. View of the interior of a brachial valve. 16-21. Pedicle and lateral views of three very perfect specimens. (W. M., No. 6696.)
Louisiana limestone, Louisiana, Missouri.

Figs. 22-34. Productella concentrica (Hall).......................p. 98
22. View of the natural mould of a brachial valve, the holotype. (A. M. N. H., No. 5080-1.)
Kinderhook, bed No. 5, Burlington, Iowa.
23-24. Views of the natural moulds of two brachial valves, entirely similar to the holotype. 25-26. Pedicle and lateral views of a nearly complete pedicle valve. 27-28. Similar views of another example. (W. M., No. 9821.)
Chouteau limestone, Chouteau Springs, Missouri.
29-31. Pedicle, brachial and lateral views of a nearly complete specimen. (W. M., No. 6713.)
Kinderhook, Burlington, Iowa.
32-34. Pedicle, lateral and posterior views of a nearly perfect pedicle valve. (W. M., No. 14769.)
Kinderhook, bed No. 6, Burlington, Iowa.

Figs. 35-36. Strophalosia cymbula Hall & Clark......................p.145
Pedicle and brachial views of a nearly complete specimen, the holotype. (W. M., No. 11897.)
New Providence shale, south of Louisville, Ky.

Figs. 37-38. Strophalosia beecheri Rowley.........................p. 146
Pedicle and brachial views of a nearly perfect pedicle valve, filled with matrix, but showing the cardinal area. The holotype. (R. R. R.)
Louisiana limestone, Louisiana, Missouri.

Figs. 39-41. Productella nummularis (Winchell).................p. 101
39. View of the exterior of a brachial valve. 40. Internal view of a brachial valve. 41. View of a pedicle valve. Cotypes. (U. M., No. 1340.)
Chonopectus sandstone, Burlington, Iowa.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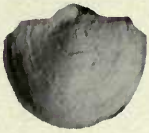
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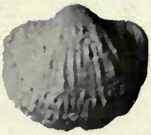
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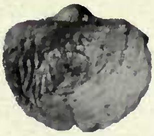
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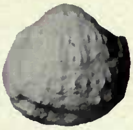
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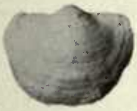
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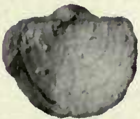
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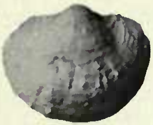
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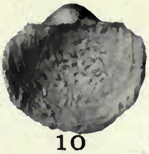
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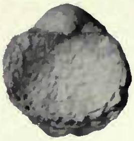
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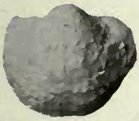
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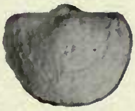
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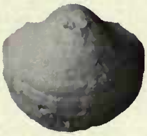
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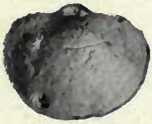
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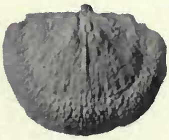
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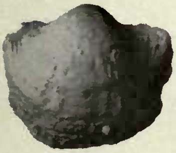
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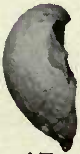
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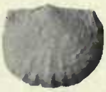
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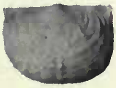
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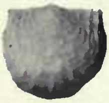
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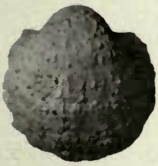
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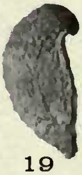
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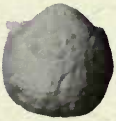
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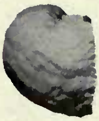
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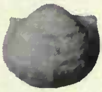
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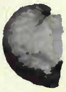
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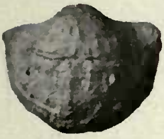
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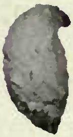
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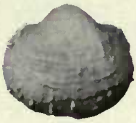
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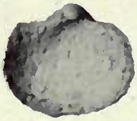
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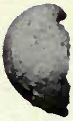
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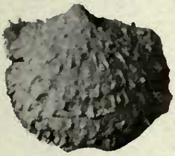
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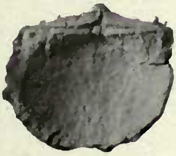
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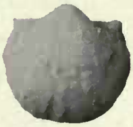
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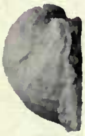
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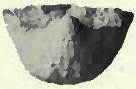
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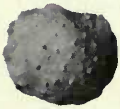
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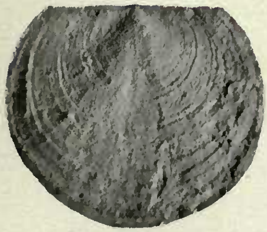
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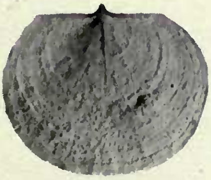
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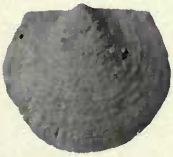
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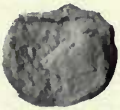
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EXPLANATION OF PLATE XX.

Figs. 1-8. Rhipidomella missouriensis (Swallow)................p. 148
1-3. Pedicle, brachial and lateral views of a very perfect specimen. 4-6. Similar views of another specimen. 7. Internal view of a pedicle valve, showing the muscular scar. 8. Internal view of a brachial valve. (W. M., No. 6692.)
Louisiana limestone, Louisiana, Missouri.

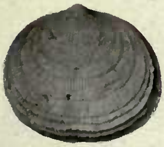
Figs. 9-18, 30-35. Rhipidomella diminutiva Rowley................p. 153
9-11. Pedicle, brachial and lateral views of a nearly complete specimen. (R. R. R.) 12-13. Pedicle and brachial views of another example. 14. Internal view of a pedicle valve. 15. Internal view of a brachial valve. (W. M., No. 14222.)
Burlington white chert, Louisiana, Missouri.
16-18. Pedicle, brachial and lateral views of a nearly complete specimen. (W. M., No. 8552.)
Pierson limestone, near Springfield, Missouri.
30-32. Pedicle, brachial and lateral views of a very perfect specimen, similar in size to the type specimen. 33-35. Views of the same specimen enlarged (x2). (R. R. R.)
Burlington white chert, Louisiana, Missouri.

Figs. 19-21. Rhipidomella sp.
Brachial, lateral and pedicle views of a nearly complete but slightly distorted specimen. (W. M., No. 14220.)
Fern Glen formation, near Kimmswick, Missouri.

Figs. 22-26. Rhipidomella dubia (Hall)............................p. 160
22-24. Pedicle, brachial and lateral views of a very perfect example. 25-26. Internal views of two pedicle valves. (W. M., No. 13055.)
Salem limestone, Spergen Hill, Indiana.

Figs. 27-29. Rhipidomella tenuicostata n. sp.......................p. 158
27. Pedicle view of a nearly complete specimen. 28. Brachial view of another specimen. 29. Interior view of a brachial valve. Cotypes. (W. M., No. 9673.)
Chouteau limestone, Pettis County, Missouri.

Figs. 36-43. Rhipidomella jerseyensis n. sp. ....p. 157
36-38. Pedicle, brachial and lateral views of a nearly complete specimen. 39. View of a brachial valve. (W. M., No. 7843.)
Fern Glen formation, near Elsah, Illinois.
40. Internal view of a pedicle valve. (W. M., No. 4691.) 41. Internal view of another pedicle valve. 42-43. Internal views of two brachial valves. (W. M., No. 4692.)
Fern Glen formation, near Kimmswick, Missouri.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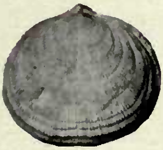
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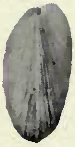
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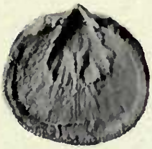
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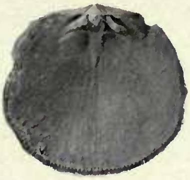
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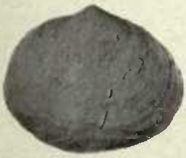
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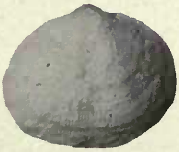
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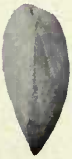
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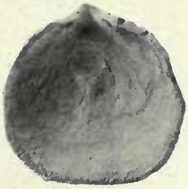
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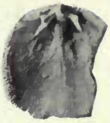
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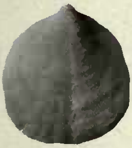
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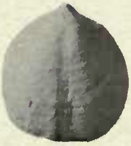
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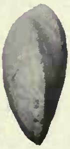
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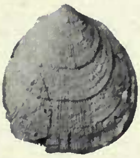
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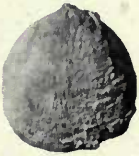
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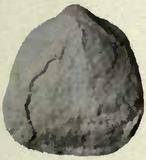
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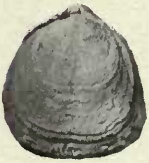
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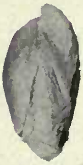
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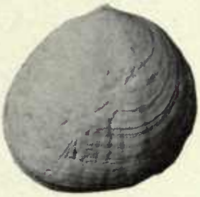
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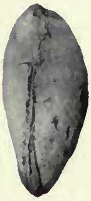
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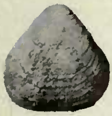
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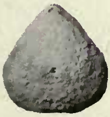
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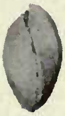
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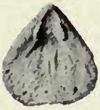
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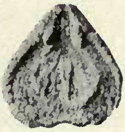
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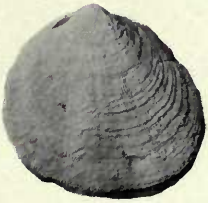
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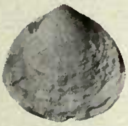
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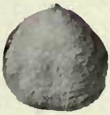
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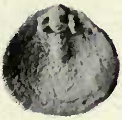
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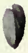
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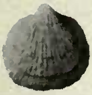
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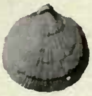
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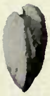
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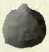
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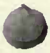
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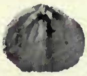
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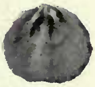
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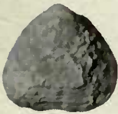
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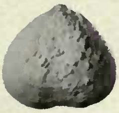
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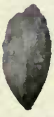
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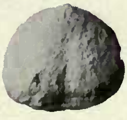
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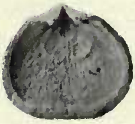
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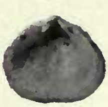
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EXPLANATION OF PLATE XXI.

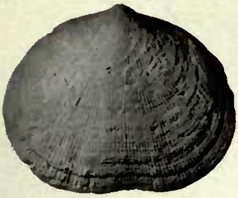
Figs. 1-4. RHIPIDOMELLA OWENI Hall & Clarke........................p. 151
1-2. External and internal views of a nearly perfect pedicle valve. (W. M., No. 4675.) 3-4. External and internal views of a nearly complete brachial valve. (W. M., No. 7857.)
New Providence shale, Button Mould Knob, Kentucky.

Figs. 5-7. RHIPIDOMELLA BURLINGTONENSIS (Hall)..................p. 149
5. View of a nearly perfect pedicle valve. (W. M., No. 11893.)
Burlington limestone, Sagetown, Illinois.
6. Similar view of another pedicle valve. (W. M., No. 7858.)
Burlington limestone, Burlington, Iowa.
7. Pedicle view of an internal cast, a little restored at the beak. (W. M., No. 13045.)
Chert of Burlington limestone, Pike County, Missouri.

Figs. 8-27. RHIPIDOMELLA THIEMEI (White)..........................p. 155
9-18. External and internal views of five pedicle valves. 19-24. External and internal views of three brachial valves. 25-27. Pedicle, brachial and lateral views of a nearly complete specimen. Cotypes. (U. M., No. 1348.)
Kinderhook, Bed No. 7, Burlington, Iowa.
8. View of a nearly perfect pedicle valve. (W. M., No. 6670.)
Kinderhook, Bed No. 6, Burlington, Iowa.

Figs. 28-32. SCHIZOPHORIA SEDALIENSIS n. sp............................p. 164
28-31. Pedicle, brachial, lateral and posterior views of a nearly perfect specimen. 32. View of the interior of an incomplete pedicle valve, showing the muscular scar. (W. M., No. 14225.)
Upper Chouteau limestone, Sedalia, Missouri.

Figs. 33-34. SCHIZOPHORIA sp.
33. View of the internal cast of a brachial valve. 34. View of an incomplete internal cast of a pedicle valve. (U. M., No. 1351.)
Chonopectus sandstone, Burlington, Iowa.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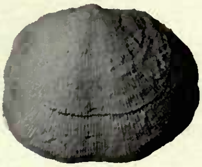
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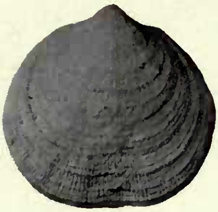
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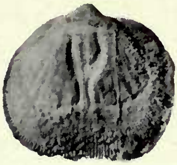
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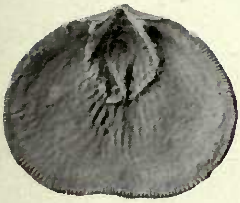
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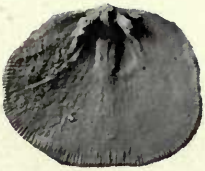
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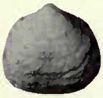
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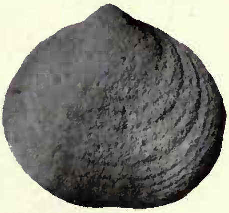
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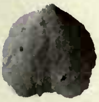
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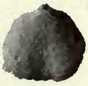
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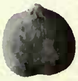
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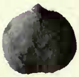
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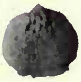
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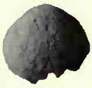
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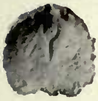
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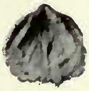
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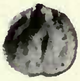
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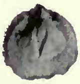
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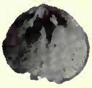
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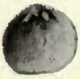
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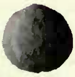
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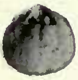
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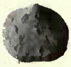
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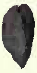
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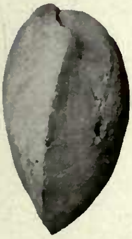
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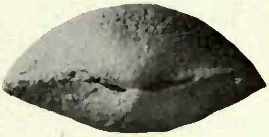
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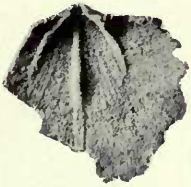
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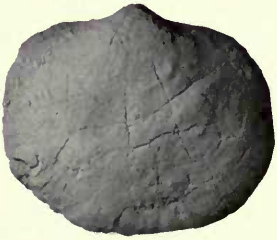
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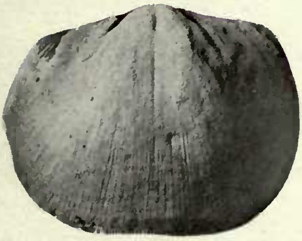
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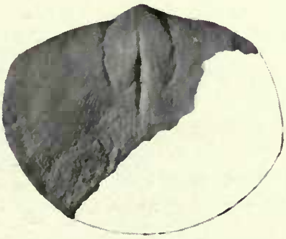
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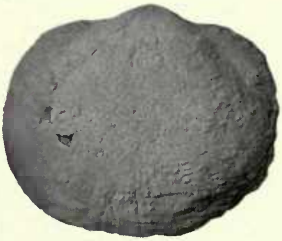
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EXPLANATION OF PLATE XXII.

Figs. 1-6. Schizophoria swallovi (Hall)........................... p. 167

1. View of a very perfect pedicle valve. (W. M., No. 7916.)

   Burlington limestone, Springfield, Missouri.

2. Similar view of another pedicle valve. 3. View of a small brachial valve. (W. M., No. 7861.)

   Burlington limestone, Henderson County, Illinois.

4-5. Brachial and posterior views of a nearly complete but somewhat crushed example. (W. M., No. 7862.)

   Burlington limestone, Burlington, Iowa.

6. View of internal cast of a pedicle valve. (W. M., No. 14233.)

   Chert of Burlington limestone, Sedalia, Missouri.

Figs. 7-14. Schizophoria poststriatula n. sp........................... p. 165

7-11. Pedicle, brachial, anterior, posterior and lateral views of a very perfect, but somewhat unsymmetrical specimen. Cotype. (D. K. G., No. 2701.)

   Fern Glen formation, Fern Glen, Missouri.

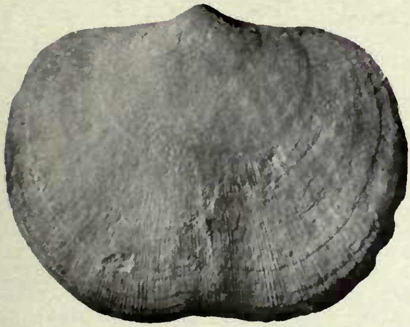
12-13. Pedicle and posterior views of a nearly complete but somewhat crushed example. 14. View of the interior of the rostral portion of a pedicle valve. Cotypes. (W. M., No. 4693.)

   Fern Glen formation, near Kimmswick, Missouri.

Figs. 15-17. Schizophoria poststriatula n. sp. (?).................. p. 165

Brachial, pedicle and posterior views of a nearly complete but somewhat crushed specimen. (W. M., No. 8553.)

   Pierson limestone, near Springfield, Missouri.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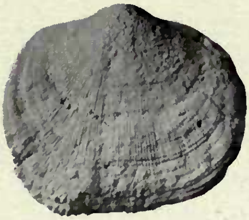
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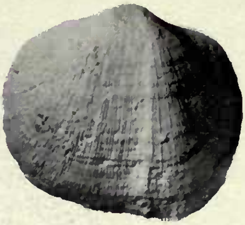
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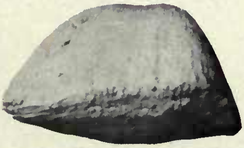
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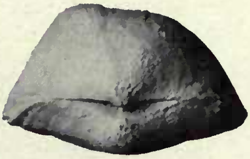
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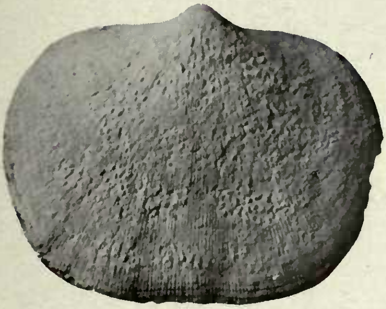
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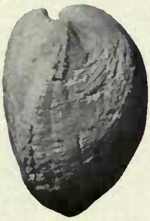
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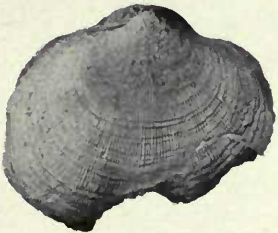
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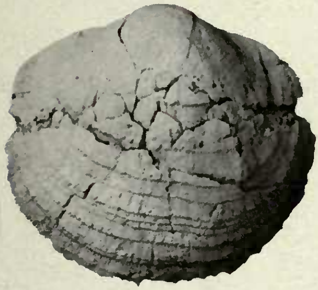
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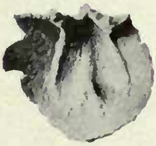
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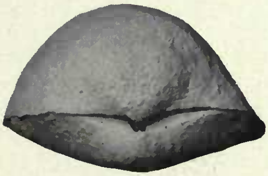
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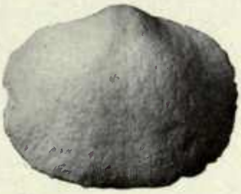
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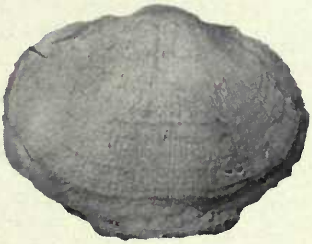
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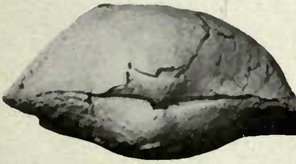
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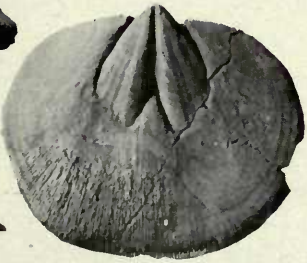
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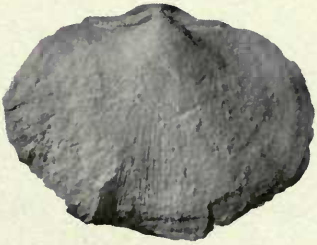
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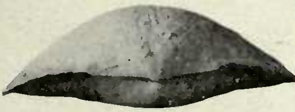
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EXPLANATION OF PLATE XXIII.

Figs. 1-5. Schizophoria subelliptica (White & Whitfield) .... p. 162

1-2. Views of two pedicle valves. (W. M., No. 14227.) 3. View of a brachial valve, one of the cotypes. 5. View of a large brachial valve, one of the cotypes. (U. M., No. 1349.)

Kinderhook, bed No. 6, Burlington, Iowa.

Figs. 6-19. Schizophoria chouteauensis n. sp. .... p. 163

6-7. Pedicle and brachial views of a nearly perfect specimen. 8-11. Brachial, pedicle, lateral and posterior views of a small but very perfect example. (W. M., No. 14226.)

Chouteau limestone, Providence, Missouri.

12-16. Brachial, pedicle, lateral, anterior and posterior views of a nearly perfect specimen. (W. M., No. 9689.)

Chouteau limestone, Pettis County, Missouri.

17-19. Brachial, pedicle and posterior views of a nearly perfect shell with much more depressed pedicle valve than usual. It is possible that this specimen should not be referred to this species. (W. M., No. 8572.)

Chouteau limestone, Green County, Missouri.

Figs. 20-45. Camarophoria bisinuata (Rowley) .... p. 172

20-24. Pedicle, brachial, lateral, anterior and posterior views of a slightly compressed but very perfect internal cast. 25-29. Similar views of another very perfect internal cast. The median septum is shown clearly in both of these specimens, that of the brachial valve less clearly. (W. M., No. 9108.)

Residual chert, Springfield, Missouri.

30-33, 34-37, 38-41. Pedicle, brachial, lateral and anterior views of three very perfect specimens, metatypes. Fig. 39 shows clearly the median septum of the brachial valve where the shell has been exfoliated. (R. R. R.)

Burlington white chert, Louisiana, Missouri.

42-45. Pedicle, brachial, lateral and anterior views of a very perfect specimen referred to this species. (W. M., No. 13929.)

Keokuk limestone, Warsaw, Illinois.

Figs. 46-51. Camarophoria explanata (McChesney) .... p. 173

46-47. Pedicle and brachial views of a sulphur cast of the holotype. (W. M., No. 12424.)

Chester group, Illinois.

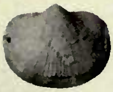
48-51. Pedicle, brachial, lateral and anterior views of a very perfect specimen. (W. M., No. 7726.)

Chester group, Chester, Illinois.

Figs. 52-60. Camarophoria hamburgensis Weller .... p. 170

52-55. Brachial, pedicle, lateral and anterior views of a small but nearly perfect specimen. 56-58. Views of three detached brachial valves. 59-60. Views of two detached pedicle valves. (W. M., No. 13937.)

Hamburg oolite (Kinderhook), Hamburg, Illinois.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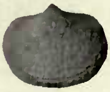
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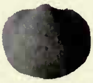
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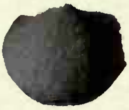
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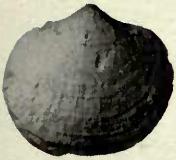
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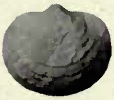
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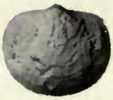
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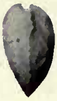
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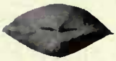
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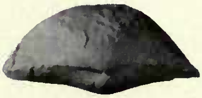
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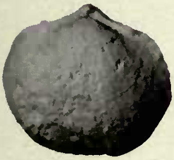
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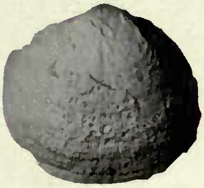
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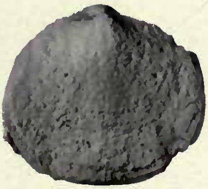
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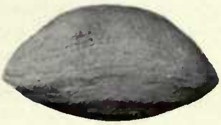
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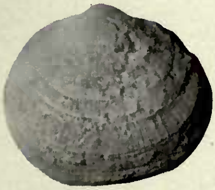
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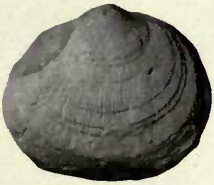
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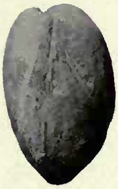
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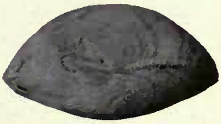
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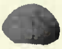
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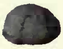
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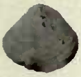
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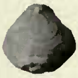
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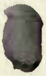
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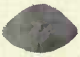
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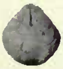
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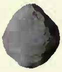
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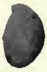
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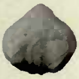
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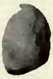
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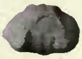
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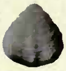
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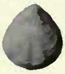
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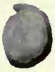
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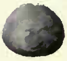
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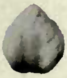
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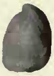
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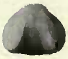
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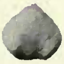
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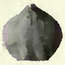
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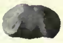
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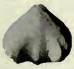
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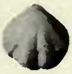
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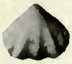
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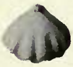
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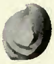
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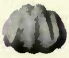
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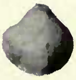
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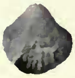
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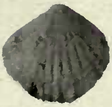
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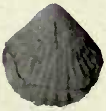
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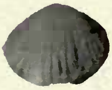
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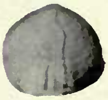
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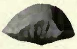
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EXPLANATION OF PLATE XXIV.

Figs. 1-8. Camarotœchia elegantula Rowley.........................p. 177
Pedicle, brachial, lateral and anterior views of two nearly perfect specimens. Metatypes. (R. R. R.)
Burlington white chert, Louisiana, Missouri.

Figs. 9-28. Camarotœchia tuta (Miller)............................p. 179
9-16. Pedicle, brachial, lateral and anterior views of two nearly perfect specimens. (D. K. G., No. 804.)
Chouteau limestone, Sedalia, Missouri.
17-20. Pedicle, brachial, lateral and anterior views of a nearly perfect specimen. (D. K. G., No. 1002.)
Lake Valley Beds, Sierra County, New Mexico.
21-24. Pedicle, brachial, lateral and anterior views of a nearly complete specimen. (D. K. G., No. 902.) 25-28. Similar views of another, larger specimen probably representing the same species. (R. R. R.)
Burlington white chert, Louisiana, Missouri.

Figs. 29-33. Camarotœchia subglobosa n. sp..........................p. 180
Pedicle, brachial, lateral, posterior and anterior views of a very perfect internal cast. Holotypes. (D. K. G., No. 702.)
Burlington chert, Newark, Knox County, Missouri.

Figs. 34-40. Camarotœchia chouteauensis (Weller)................p. 176
34-37. Pedicle, brachial, lateral and anterior views of a very perfect specimen. Cotypes. (W. M., No. 9704.)
Chouteau limestone, Sedalia, Missouri.
38-40. Pedicle, lateral and anterior views of a smaller example. Cotype. (W. M., No. 6709.)
Chouteau limestone, Chouteau Springs, Missouri.

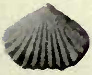
Figs. 41-60. Camarotœchia mutata (Hall)..........................p. 181
41-48. Pedicle, brachial, anterior and lateral views of two very large individuals. (W. M., No. 7735.)
Salem limestone, Spergen Hill, Indiana.
53-60. Pedicle, brachial, lateral and anterior views of three nearly complete specimens. (W. M., No. 13931.)
Salem limestone, Hull's Hollow, near Alton, Illinois.

Figs. 61-72. Camarotœchia grosvenori (Hall).........................p. 183
61-62. Pedicle and brachial views of a small specimen. 63. Anterior view of a larger example. 64. The same enlarged (x4). (W. M., No. 13932.)
Salem limestone, Stinesville, Indiana.
65-68. Pedicle, brachial, lateral and anterior views of a large specimen. 69-72. Similar views of another specimen. (W. M., No. 13935.)
Salem limestone, Bloomington, Indiana.

Figs. 73-81. Allorhynchus heteropsis (Winchell)..................p. 197
73-76. Brachial, pedicle, lateral and anterior views of a nearly complete specimen. 77-79. Pedicle, brachial and lateral views of a very perfect specimen. 80-81. Pedicle and brachial views of a third specimen. (W. M., No. 4756.)
Kinderhook, Bed No. 4, Burlington, Iowa.

Fig. 82. RHYNCHOPORA PUSTULOSA (White) .... p. 230
View of a large pedicle valve. (W. M., No. 4821.)
Kinderhook, Bed No. 4, Burlington, Iowa.

Figs. 83-86. ALLORHYNCHUS ACUTIPLICATUM n. sp. .... p. 201
Pedicle, brachial, lateral and anterior views of a very perfect specimen. Holotype. (D. K. G., No. 2404.)
Carterville formation(?). Webb City, Missouri.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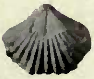
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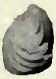
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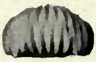
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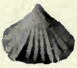
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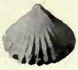
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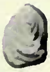
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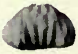
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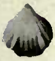
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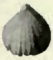
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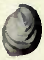
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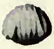
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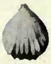
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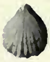
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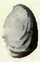
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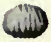
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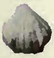
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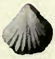
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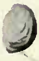
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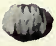
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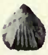
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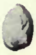
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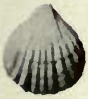
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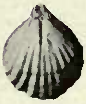
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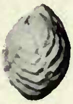
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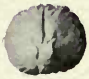
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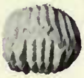
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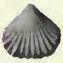
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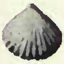
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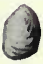
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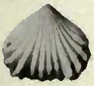
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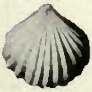
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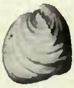
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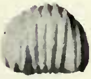
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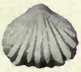
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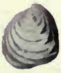
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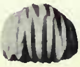
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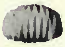
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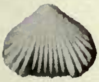
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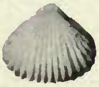
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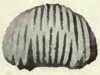
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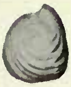
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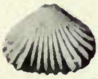
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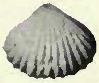
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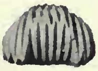
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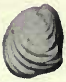
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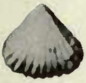
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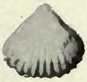
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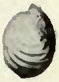
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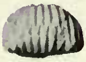
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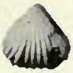
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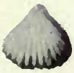
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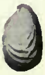
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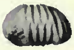
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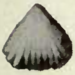
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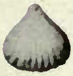
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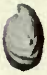
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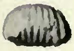
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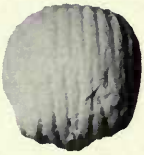
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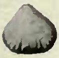
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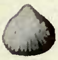
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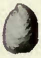
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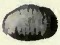
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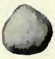
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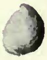
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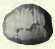
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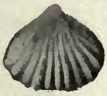
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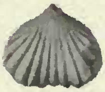
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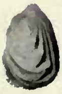
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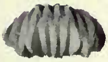
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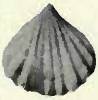
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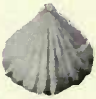
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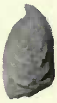
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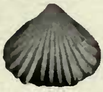
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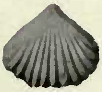
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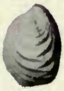
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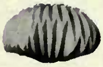
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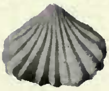
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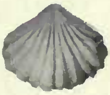
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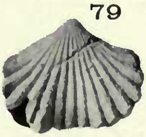
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EXPLANATION OF PLATE XXV.

Figs. 1-6. ALLORHYNCHUS MACRA (Hall)............................p. 199

1-2, 3-4. Pedicle and brachial views of two examples of about maximum size. (W. M., No. 13936.)

Salem limestone, Hull's Hollow, above Alton, Illinois.

5-6. Pedicle and brachial views (x4) of a small example having the characteristics of *Rhynchonella ricinula* Hall. (W. M., No. 2992.)

Salem limestone, Stinesville, Indiana.

Figs. 7-17. PUGNOIDES OTTUMWA (White)............................p. 193

7-9. Pedicle, brachial and posterior views of a large and broad specimen. 10-11, 12-13. Pedicle and brachial views of two very perfect examples. 14-17. Pedicle, brachial, anterior and posterior views of a nearly perfect specimen. (W. M., No. 13930.)

Ste. Genevieve limestone, Fountain Creek, near Waterloo, Illinois.

Figs. 18-21. RHYNCHOPORA (?) PERRYENSIS n. sp.....................p. 239

Pedicle, brachial, anterior and lateral views of a very perfect specimen. (D. K. G., No. 2304.)

Landing 76, Perry County, Missouri.

Figs. 22-26. PUGNOIDES BOONENSIS (Shumard).......................p. 195

Pedicle, brachial, anterior, posterior and lateral views of a very perfect specimen. (D. K. G., No. 2201.)

Burlington limestone, Louisiana, Missouri.

Figs. 27-33. LIORHYNCHUS GREENIANUM (Ulrich).....................p. 185

27-30. Pedicle, brachial, anterior and lateral views of a very perfect internal cast. 31-33. Brachial, lateral and anterior views of another specimen. (W. M., No. 13645.)

Knobstone shale, New Albany, Indiana.

Figs. 34-36. PUGNAX QUADRIROSTRIS Beede..........................p. 204

Pedicle, brachial and lateral views of a very perfect individual (x4). (W. M., No. 2996.)

Salem limestone, Bloomington, Indiana.

Figs. 37-42. PUGNAX WORTHENI (Hall)..............................p. 203

37-39. Pedicle, brachial and anterior views of a large and nearly perfect specimen. (W. M., No. 13928.)

Salem limestone, Hull's Hollow, above Alton, Illinois.

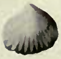
40-42. Similar views of the holotype. (A. M. N. H., No. 5064.)

Salem limestone, near Alton, Illinois.

Figs. 43-52. SHUMARDELLA MISSOURIENSIS (Shumard)................p. 222

43-47. Pedicle, brachial, anterior, posterior and lateral views of a nearly perfect specimen. 48-52. Similar views of another specimen. (W. M., No. 9667.)

Chouteau limestone, Chouteau Springs, Missouri.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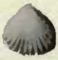
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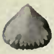
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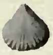
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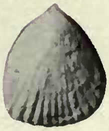
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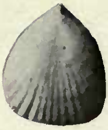
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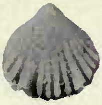
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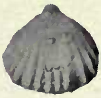
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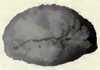
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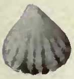
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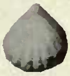
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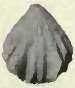
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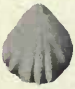
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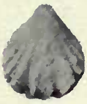
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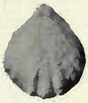
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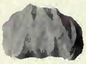
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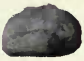
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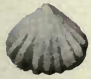
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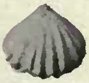
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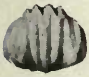
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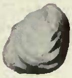
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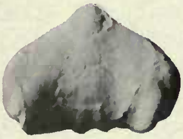
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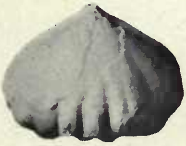
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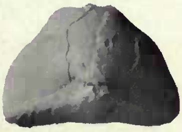
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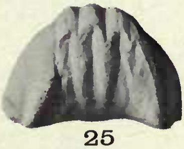
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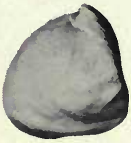
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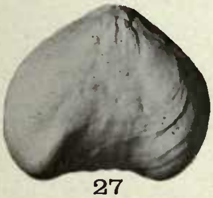
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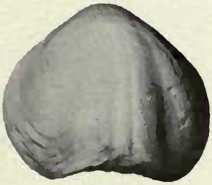
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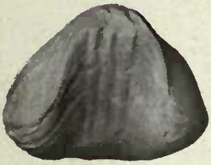
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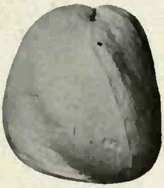
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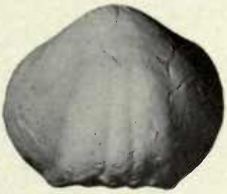
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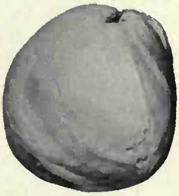
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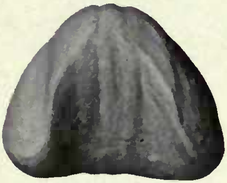
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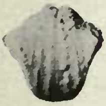
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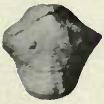
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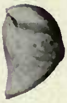
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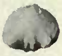
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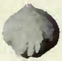
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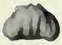
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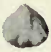
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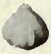
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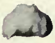
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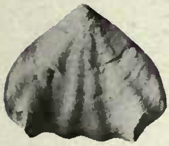
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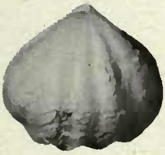
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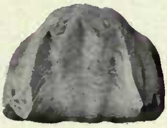
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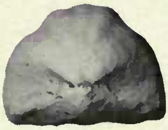
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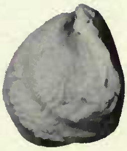

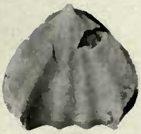
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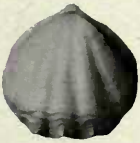
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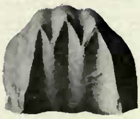
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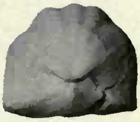
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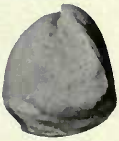
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EXPLANATION OF PLATE XXVI.

Figs. 1-9. SHUMARDELLA OBSOLENS (Hall) ....p. 224

1-3. Brachial, anterior and lateral views of a very perfect shell.

4-6. Pedicle, posterior and anterior views of another specimen.

7-9. Brachial and two lateral views of three separate specimens. (W. M., No. 9668.)

Chouteau limestone, Chouteau Springs, Missouri.

Figs. 10-14. PARYPHORHYNCHUS ELONGATUM Weller...................p. 191

Pedicle, brachial, lateral, anterior and posterior views of a very perfect specimen. (D. K. G., No. 3901.)

Kinderhook limestone, South Fabius River, southeast corner of Knox County, Missouri.

Figs. 15-22. PARYPHORHYNCHUS STRIATICOSTATUM (Meek & Worthen) .p. 189

15-19. Pedicle, brachial, lateral, anterior and posterior views of a nearly perfect specimen. (W. M., No. 10784.)

Kinderhook limestone, Pike County, Illinois.

20-22. Pedicle, brachial and lateral views of another nearly perfect example. (W. M., No. 6658.)

Kinderhook, Bed No. 4, Burlington, Iowa.

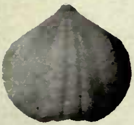
Figs. 23-28. PARYPHORHYNCHUS TRANSVERSUM Weller................p. 188

23. View of a nearly perfect pedicle valve. (W. M., No. 10548.)

Kinderhook sandstone, Kinderhook, Illinois.

24-28. Pedicle, brachial, anterior, posterior and lateral views of a nearly perfect internal cast. (U. M., No. 1375.)

Chonopectus sandstone, Burlington, Iowa.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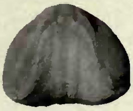
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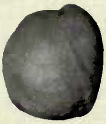
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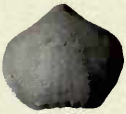
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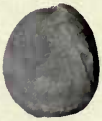
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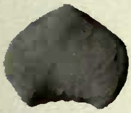
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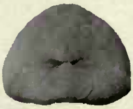
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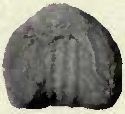
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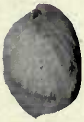
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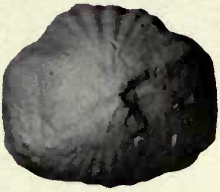
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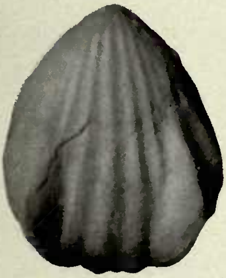
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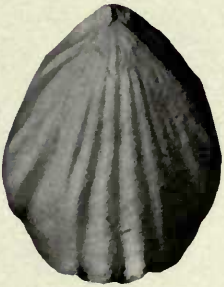
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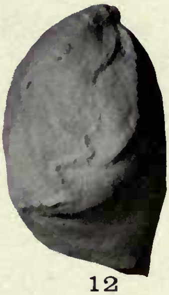
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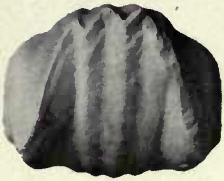
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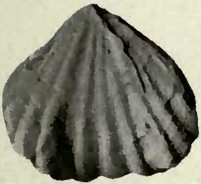
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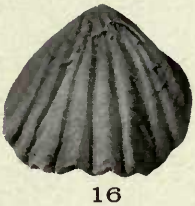
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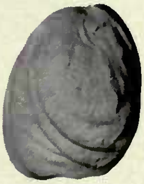
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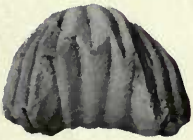
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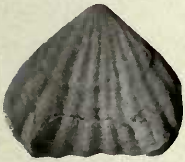
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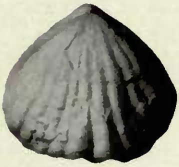
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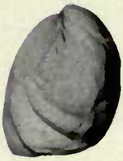
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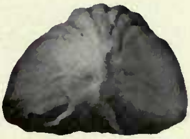
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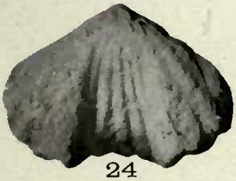
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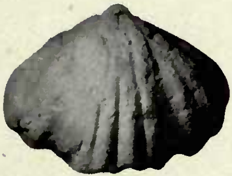
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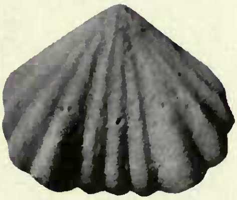
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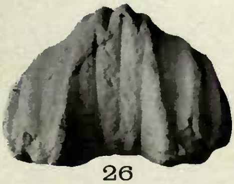
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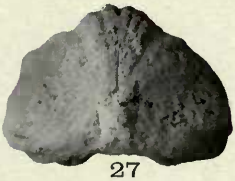
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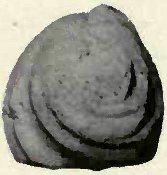
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EXPLANATION OF PLATE XXVII.

Figs. 1-6. RHYNCHOTETRA CAPUT-TESTUDINIS (White)................p. 206

1-4. Pedicle, brachial, lateral and anterior views of the holotype. (U. M., No. 1376.)

Base of Burlington limestone, Burlington, Iowa.

5. View of an incomplete internal cast of a pedicle valve. 6. View of an incomplete internal cast of a brachial valve. (U. M., No. 1376.)

Kinderhook, Bed No. 7, Burlington, Iowa.

Figs. 7-15. RHYNCHOTETRA GIBBOSUM (Greger)......................p. 211

7-10. Lateral, pedicle, brachial and anterior views of a very perfect, small specimen. Cotype. (D. K. G., No. 3602.)

Burlington limestone, Hannibal, Missouri.

11-13. Pedicle, brachial and lateral views of a nearly perfect, large specimen. Cotype. (D. K. G., No. 3702.)

Burlington limestone, Louisiana, Missouri.

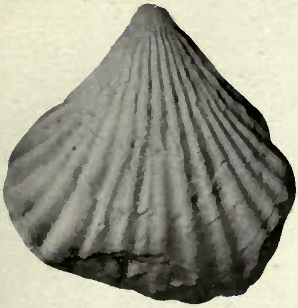
14-15. Views of two imperfect brachial valves. (W. M., No. 9715.)

Burlington limestone, Marion County, Missouri.

Figs. 16-20. RHYNCHOTETRA OVATUM (Greger)......................p. 208

16-17. Pedicle and brachial views of a nearly perfect shell. 18-20. Pedicle, brachial and lateral views of another specimen. Cotypes. (D. K. G., No. 3802.)

Chouteau limestone, Kiesenger Bluff, Warsaw, Benton County, Missouri.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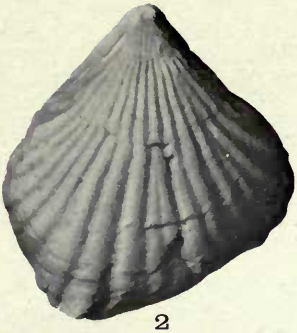
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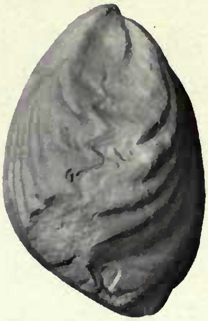
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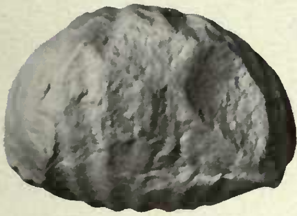
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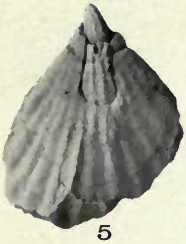
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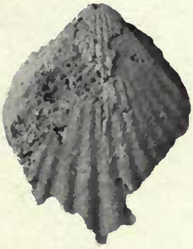
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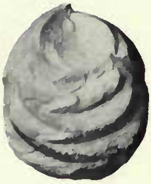
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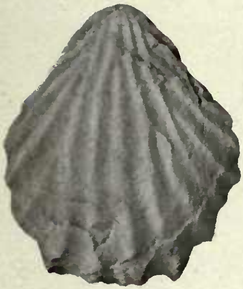
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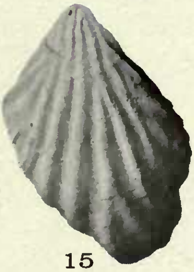
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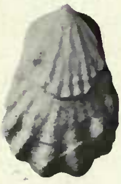
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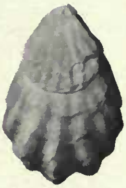
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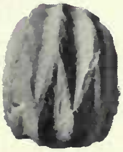
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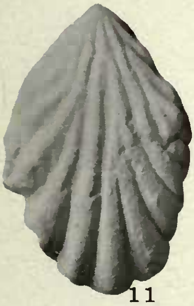
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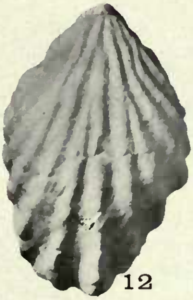
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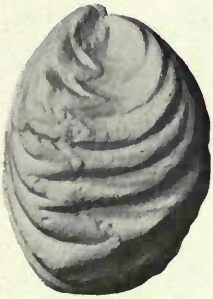
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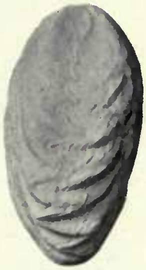
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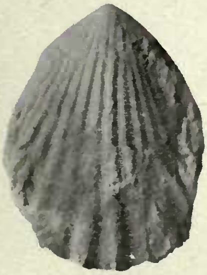
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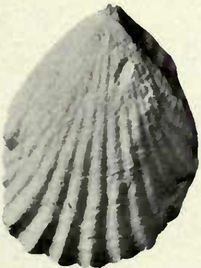
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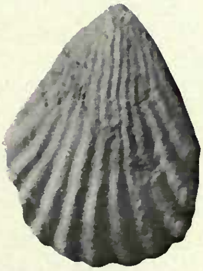
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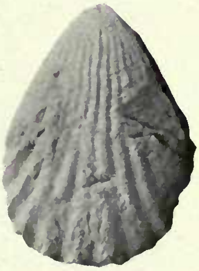
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EXPLANATION OF PLATE XXVIII.

Figs. 1-8. RHYNCHOTETRA MISSOURIENSIS n. sp........................p. 210

1-5. Pedicle, brachial, lateral, posterior and anterior views of a nearly perfect specimen. (W. M., No. 13962.) 6. Anterior view of a specimen. (D. K. G.) 7-8. Posterior and pedicle views of the specimen ground for the cross-sections of the rostral portion of the shell. (W. M., No. 13965.)

Burlington limestone, Missouri.

Figs. 9-12. RHYNCHOTETRA ELONGATUM n. sp..........................p. 209

Pedicle, brachial, lateral and anterior views of a nearly perfect specimen, the holotype. (W. M., No. 8549.)

Pierson limestone, near Springfield, Missouri.

Figs. 13-24. TETRACAMERA SUBCUNEATA (Hall).......................p. 214

13-15. Pedicle, brachial and posterior views of a very perfect specimen. 16-18. Pedicle, brachial and anterior views of another specimen. 19. Brachial view of a specimen with very broad plications. 20. Pedicle view of a specimen with very concave postero-lateral slopes. 21-22. Brachial and lateral views of a narrow, elongated specimen. 23-24. Pedicle and lateral views of a very short and thick specimen. (W. M., No. 7724.)

Salem limestone, Salem, Indiana.

Figs. 25-34. TETRACAMERA ARCTIROSTRATA (Swallow).................p. 215

25-29. Pedicle, brachial, lateral, anterior and posterior views of a very perfect specimen. (D. K. G., No. 401.)

Salem limestone, Boonville, Missouri.

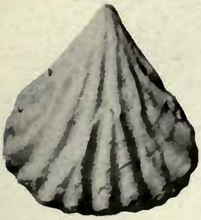
30-34. Similar views of another specimen. (D. K. G., No. 501.)

Salem limestone, Alton, Illinois.

Figs. 35-39. TETRACAMERA MISSOURIENSIS n. sp.......................p. 216

35-36. Pedicle and lateral views of the internal cast of a pedicle valve. 37-38. Brachial and lateral views of the internal cast of a brachial valve. 39. View of the internal cast of a brachial valve. Cotypes. (W. M., No. 14280.)

Residual chert, Callaway County, Missouri.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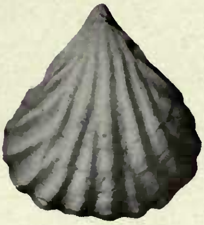
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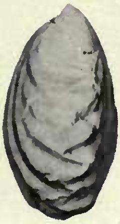
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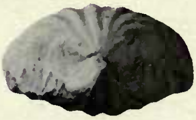
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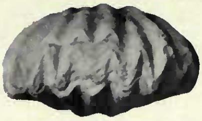
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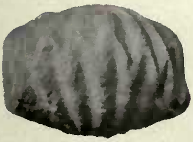
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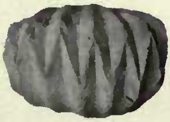
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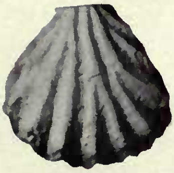
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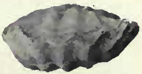
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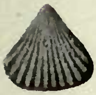
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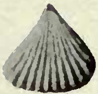
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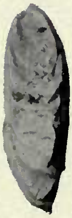
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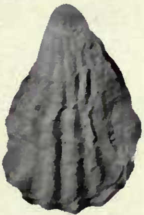
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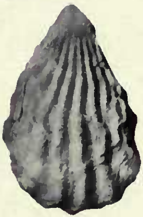
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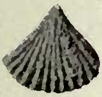
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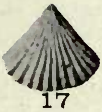
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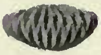
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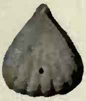
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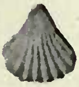
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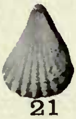
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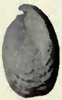
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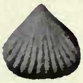
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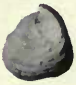
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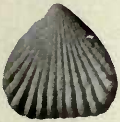
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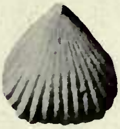
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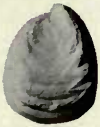
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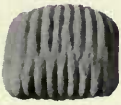
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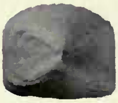
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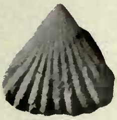
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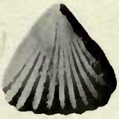
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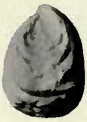
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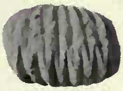
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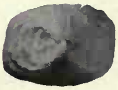
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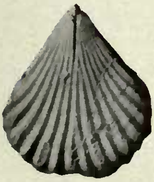
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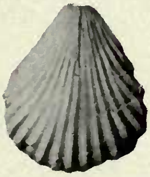
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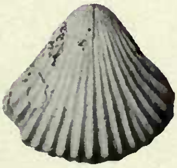
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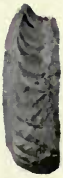
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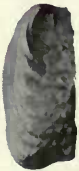
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EXPLANATION OF PLATE XXIX.

Figs. 1-13. TETRACAMERA SUBTRIGONA (Meek & Worthen)............p. 218

1-5. Pedicle, brachial, lateral, posterior and anterior views of a large specimen. 6-10. Pedicle, lateral, anterior, posterior and brachial views of a smaller specimen. (W. M., No. 8683.)
Keokuk limestone, Warsaw, Illinois.

11. View of an internal cast of a pedicle valve. (W. M., No. 8684.)
Chert of Burlington limestone, Louisiana, Missouri.

12. View of an internal cast of a brachial valve. (W. M., No. 320.)
Residual chert, Springfield, Missouri.

13. View of an internal cast of a pedicle valve with the matrix broken away to show the spondylium. (W. M., No. 13927.)
Residual chert, Aurora, Missouri.

Figs. 14-18. RHYNCHOPORA PUSTULOSA (White).....................p. 230

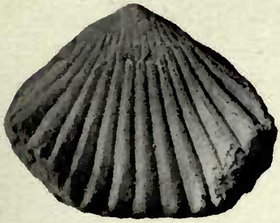
Pedicle, brachial, lateral, anterior and posterior views of a very perfect specimen. (W. M., No. 9690.)
Kinderhook, Bed No. 4, Burlington, Iowa.

Figs. 19-30. RHYNCHOPORA HAMBURGENSIS Weller...................p. 228

19. View of a pedicle valve. 20-21. Views of two brachial valves. 22. Anterior view of an imperfect specimen. 23-26. Pedicle, brachial, lateral and anterior views of a nearly perfect specimen. 27-30. Similar views of a smaller specimen. (W. M., No. 7742.)
Hamburg oolite, Kinderhook, Hamburg, Illinois.

Figs. 31-38. RHYNCHOPORA BEECHERI Greger........................p. 232

31-32. Pedicle and posterior views of an internal cast. 33-34. Anterior and pedicle views of an internal cast. 35-36. Brachial and pedicle views of an internal cast. 37-38. Brachial and pedicle views of an internal cast. (W. M., No. 376.)
Residual chert, Springfield, Missouri.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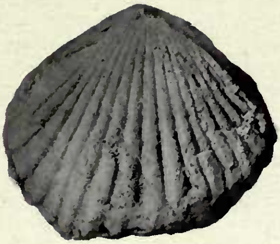
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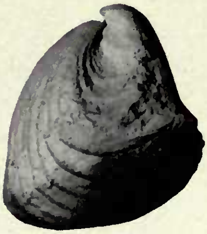
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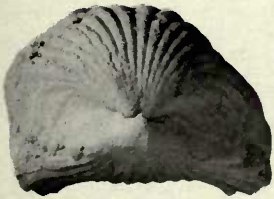
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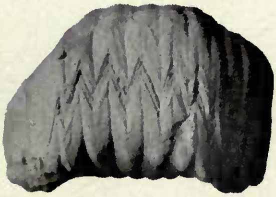
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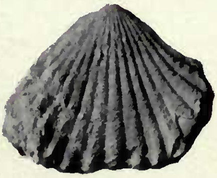
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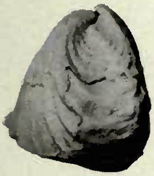
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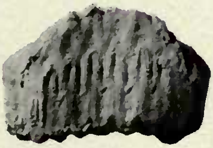
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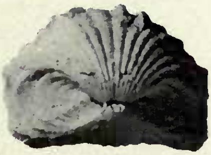
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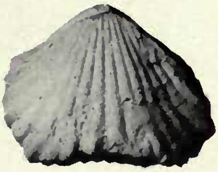
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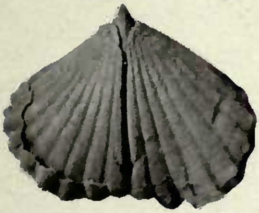
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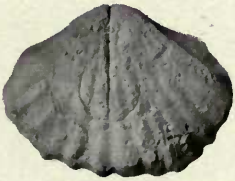
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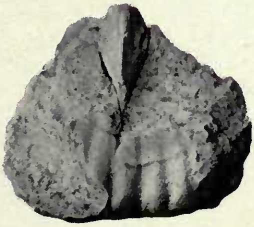
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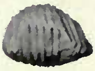
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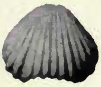
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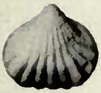
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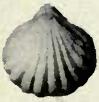
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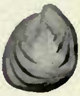
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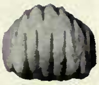
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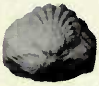
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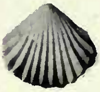
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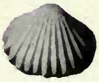
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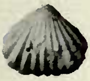
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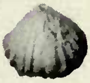
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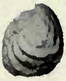
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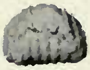
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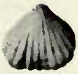
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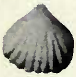
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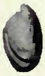
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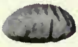
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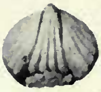
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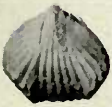
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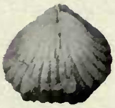
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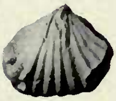
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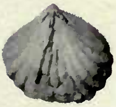
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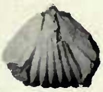
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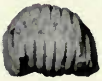
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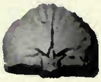
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EXPLANATION OF PLATE XXX.

Figs. 1-6. Rhynchopora persinuata (Winchell)....................p. 233

1. View of an internal cast of a pedicle valve. The holotype. (U. M., No. 1998.) 2. Anterior view of a large internal cast, imperfect posteriorly. (W. M., No. 6712.)

Kinderhook, Bed No. 7, Burlington, Iowa.

3-4. Brachial and lateral views of a nearly complete specimen. 5-6. Pedicle and anterior views of another specimen. (D. K. G., No. 1302.)

Lake Valley beds, Lake Valley, New Mexico.

Figs. 7-15. Rhynchopora? cooperensis (Shumard)..................p. 235

7-11. Pedicle, brachial, lateral, anterior and posterior views of a nearly complete specimen. (W. M., No. 9661.)

Chouteau limestone, Chouteau Springs, Missouri.

12-15. Pedicle, brachial, lateral and anterior views of a nearly complete specimen. (R. R. R.)

Burlington white chert, Louisiana, Missouri.

Figs. 16-17. Rhynchopora sp.

16. View of a pedicle valve. (W. M., No. 6716.)

Burlington limestone, Burlington, Iowa.

17. View of a brachial valve probably belonging to the same species. (W. M., No. 13958.)

Burlington limestone, Springfield, Missouri.

Figs. 18-21. Rhynchopora? rowleyi n. sp............................p. 237

Pedicle, brachial, anterior and lateral views of a very perfect specimen. (R. R. R.)

Louisiana limestone, Louisiana, Missouri.

Figs. 22-25. Rhynchopora? cooperensis (Shumard) (?)...........p. 235

Pedicle, brachial, posterior and lateral views of a somewhat crushed specimen. (W. M., No. 8548.)

Pierson limestone, near Springfield, Missouri.

Figs. 26-29. Centronella louisianensis n. sp.......................p. 241

26-27. Pedicle and brachial views of a very perfect shell (x4). 28-29. Pedicle and brachial views of another example (x4). (W. M., No. 6730.)

Louisiana limestone, Louisiana, Missouri.

Figs. 30-33. Trigeria? curriei (Rowley)...........................p. 245

30-31. Pedicle and brachial views of a very perfect shell (x4). 32-33. Pedicle and brachial views of another specimen (x4). (W. M., No. 6732.)

Louisiana limestone, Louisiana, Missouri.

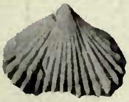
Figs. 34-39. Selenella pediculus (Rowley)........................p. 244

34-35. Pedicle and brachial views of a very perfect specimen (x4). 36-37. Similar views of another specimen (x4). 38-39. Similar views of a third example (x4). (W. M., No. 6731.)

Louisiana limestone, Louisiana, Missouri.

Figs. 40-42. CENTRONELLA (?) EMACIATA Rowley .... p. 242
Pedicle, lateral and brachial views of a nearly perfect specimen, the holotype. (R. R. R.)
Burlington white chert, Louisiana, Missouri.

Figs. 43-55. DIELASMELLA COMPRESSA Weller .... p. 280
43-44, 45-46, 47-48, 49-50. Pedicle and brachial views of four different specimens. 51. Pedicle view (x4) of specimen figured in Figs. 49-50. 52-53. Pedicle and brachial views (x4) of specimen figured in Figs. 45-46. 54-55. Pedicle and brachial views (x4) of specimen figured in Figs. 47-48. (W. M., No. 11347.)
Glen Park limestone, Glen Park, Missouri.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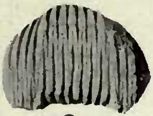
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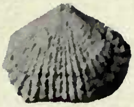
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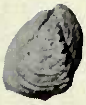
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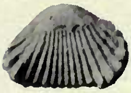
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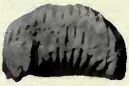
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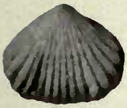
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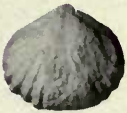
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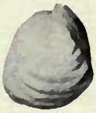
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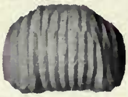
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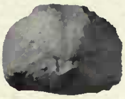
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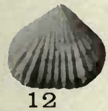
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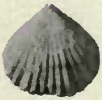
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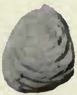
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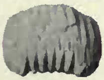
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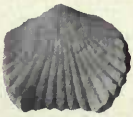
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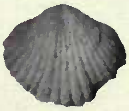
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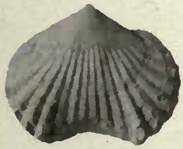
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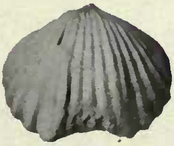
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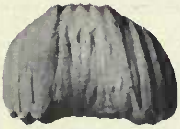
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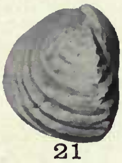
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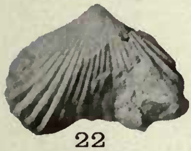
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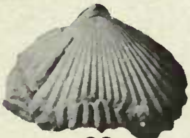
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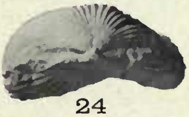
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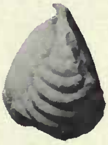
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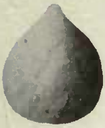
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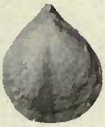
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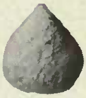
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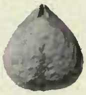
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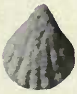
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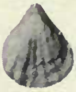
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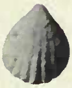
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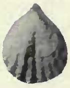
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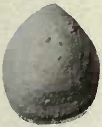
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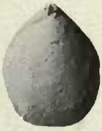
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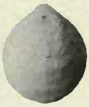
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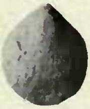
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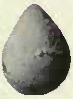
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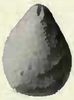
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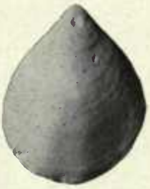
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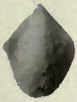
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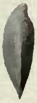
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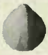
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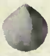
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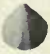
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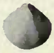
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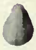
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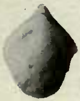
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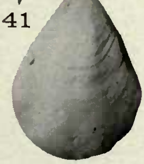
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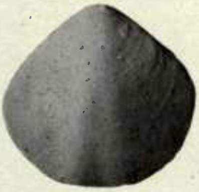
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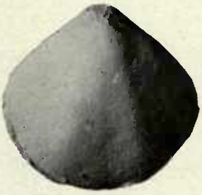
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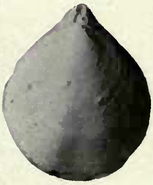
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EXPLANATION OF PLATE XXXI.

Figs. 1-4. Dielasmella calhounensis n. sp........................p. 281
1-3. Pedicle, brachial and lateral views of a nearly complete specimen. 4. View of a partially exfoliated pedicle valve. (W. M., No. 14246.)
Hamburg oolite, Kinderhook, Hamburg, Illinois.

Figs. 5-15. Centronelloidea rowleyi (Worthen)....................p. 247
5-6. Views of a pedicle and a brachial valve, the cotypes. (I. S. M.) 7-10. Pedicle, brachial, lateral and anterior views of a nearly perfect specimen. 11-14. Pedicle, brachial, lateral and posterior views of another specimen. 15. View of the brachidium. (R. R. R.)
Burlington white chert, Louisiana, Missouri.

Figs. 16-18. Hamburgia typa n. sp..................................p. 283
16-17. Views of two pedicle valves. 18. View of a brachial valve. (W. M., No. 14245.)
Hamburg oolite, Kinderhook, Hamburg, Illinois.

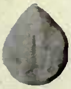
Figs. 19-24. Dielasmoides bisinuata Weller..........................p. 254
19-21. Pedicle, brachial and lateral views of a nearly complete specimen. 22-24. Similar views of a larger specimen. (D. K. G., No. 1704.)
Patrick's Quarry, Middle Fabius River, Lewis County, Missouri.

Figs. 25-27. Dielasma shumardanum (Miller).....................p. 268
Lateral, pedicle and brachial views of a nearly perfect specimen. (W. M., No. 7770.)
Chester group, Big Hill, Jackson County, Illinois.

Figs. 28-34. Dielasma sinuata n. sp...............................p. 262
28-31. Pedicle, brachial, lateral and posterior views of a nearly complete internal cast, somewhat restored anteriorly. 32-33. Views of the internal casts of two brachial valves. (W. M., No. 334.)
Residual chert, Springfield, Missouri.
34. View of the internal cast of a brachial valve, the holotype of *Lingula crawfordsvillensis* Gurley. (W. M., No. 6315.)
Crawfordsville shale, Crawfordsville, Indiana.

Figs. 35-44. Dielasma arkansanum n. sp..........................p. 269
35-37. Pedicle, brachial and lateral views of a nearly complete specimen. 38-40. Similar views of a smaller example. (D. K. G., No. 1505.)
Webb City, Missouri (Carterville formation?).
41-43. Pedicle, brachial and lateral views of a nearly complete specimen. 44. Pedicle view of another specimen. Cotypes. (W. M., No. 14255.)
Fayetteville, Arkansas.

Figs. 45-49. Dielasma burlingtonensis (White)....................p. 261
45-47. Pedicle, brachial and lateral views of a nearly perfect but slightly distorted specimen. 48-49. External and internal views of a pedicle valve, imperfect anteriority. Cotypes. (U. M., No. 1373.)
Base of Burlington limestone, Burlington, Iowa.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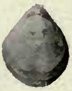
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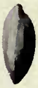
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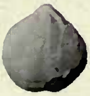
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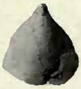
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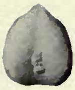
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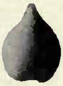
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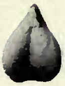
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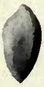
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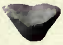
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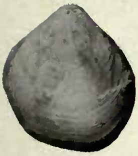
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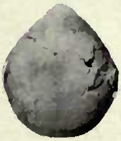
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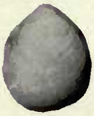
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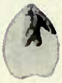
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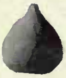
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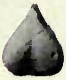
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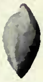
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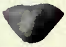
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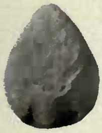
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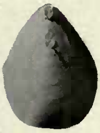
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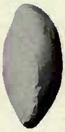
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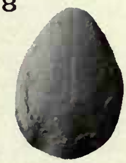
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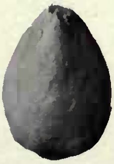
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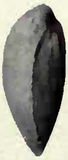
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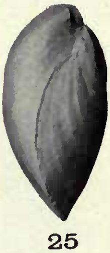
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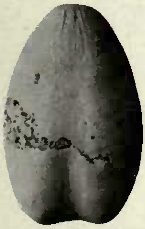
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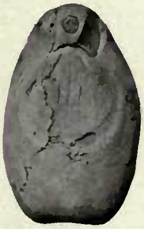
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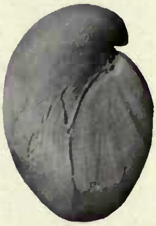
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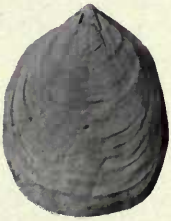
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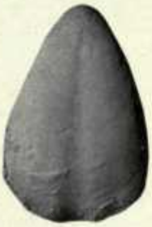
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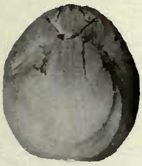
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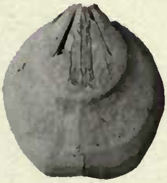
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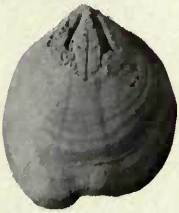
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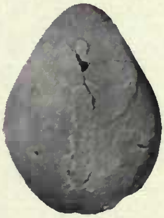
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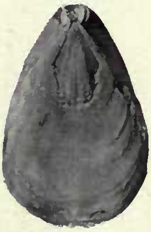
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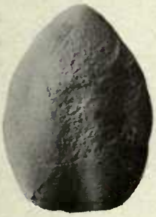
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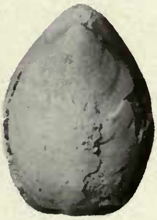
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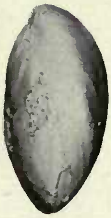
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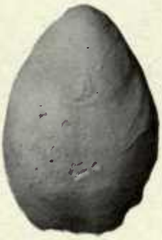
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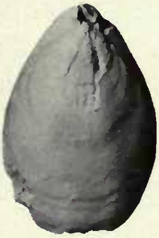
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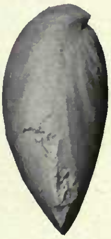
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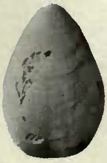
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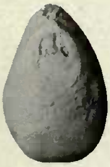
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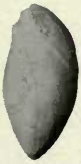
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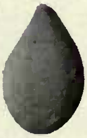
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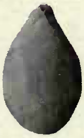
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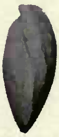
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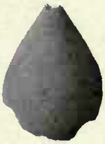
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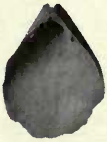
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EXPLANATION OF PLATE XXXII.

Figs. 1-17. Dielasma chouteauensis n. sp. . . . . p. 257

1-4. Pedicle, brachial, lateral and anterior views of a large specimen figured by Hall and Clarke as *D. formosa.* (W. M., No. 12237.)

Chouteau limestone, Missouri.

5. View of a pedicle valve. (W. M., No. 9703.)

Chouteau limestone, Pettis County, Missouri.

6-8. Pedicle, brachial and anterior views of a nearly perfect specimen. 9-12. Posterior, pedicle, brachial and lateral views of a nearly perfect specimen. (W. M., No. 9666.)

Chouteau limestone, Chouteau Springs, Missouri.

13-15. Pedicle, brachial and lateral views of an imperfect specimen. 16-17. Brachial and pedicle views of another imperfect specimen. (W. M., No. 8547.)

Pierson limestone, near Springfield, Missouri.

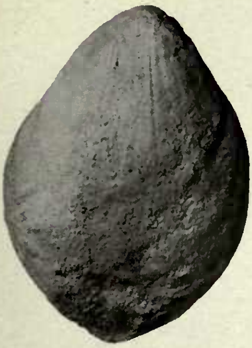
Figs. 18-28. Dielasma inflata n. sp. . . . . p. 264

18-21. Lateral, brachial, pedicle and anterior views of a very perfect specimen, the holotype. (W. M., No. 14235.)

Salem limestone, Barrett's Station, Missouri.

22-24. Lateral, brachial and pedicle views of a very perfect but narrower specimen. (W. M., No. 7772.) 25-28. Lateral, anterior, pedicle and brachial views of a specimen which probably belongs to this species. (W. M., No. 7773.)

Salem limestone, Spergen Hill, Indiana.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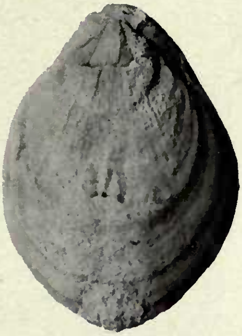
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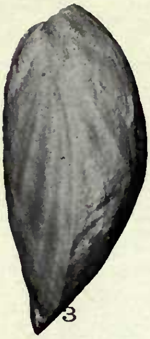
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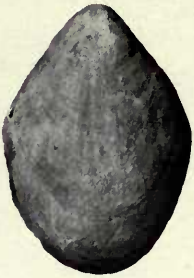
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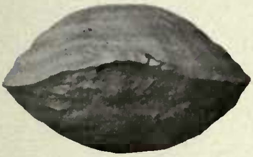
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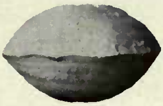
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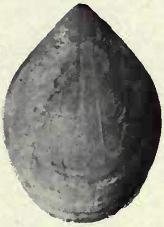
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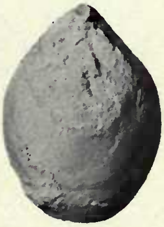
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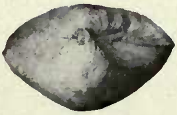
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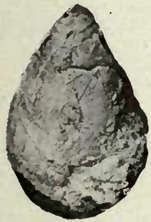
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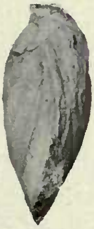
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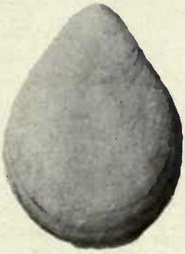
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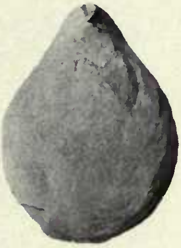
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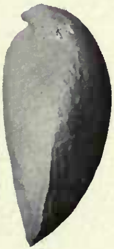
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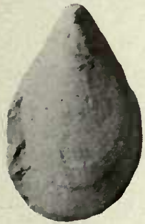
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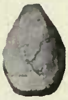
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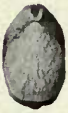
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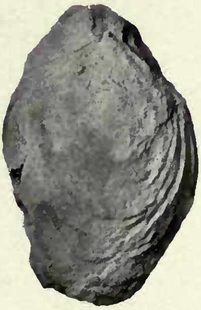
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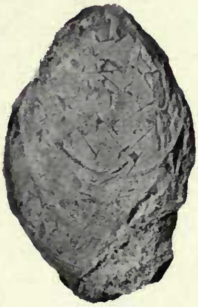
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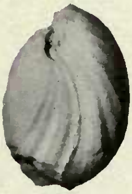
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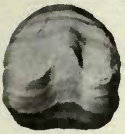
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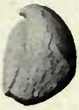
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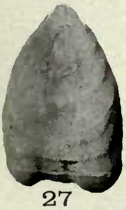
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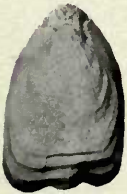
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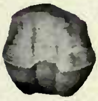
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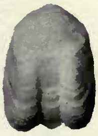
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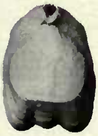
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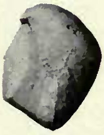
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EXPLANATION OF PLATE XXXIII.

Figs. 1-3. Dielasma osceolensis n. sp. . . . . .p. 260

Pedicle, brachial and lateral views of the holotype. (W. M., No. 7743.)

Lower Burlington limestone, Osceola, Missouri.

Figs. 4-5. Dielasma fernglenensis Weller. . . . . .p. 259

Pedicle and brachial views of the holotype. (W. M., No. 4688.)

Fern Glen formation, near Kimmswick, Missouri.

Figs. 6-11. Dielasma subspatulatum n. sp. . . . . .p. 270

Pedicle, brachial and lateral views of two specimens. Cotypes. (W. M., No. 14254.)

Washington County, Arkansas.

Figs. 12-17. Dielasma formosum Hall. . . . . .p. 265

12-14. Pedicle, brachial and lateral views of the holotype of *D. obovata* H. & C. (W. M., No. 12238.)

Salem limestone (?), Kentucky.

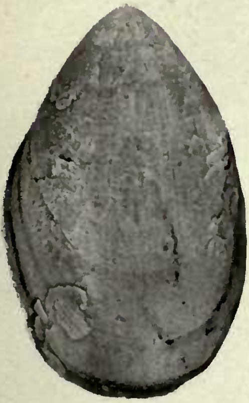
15-17. Pedicle, brachial and lateral views of a very perfect specimen of typical form. (W. M., No. 449.)

Salem limestone, Spergen Hill, Indiana.

Figs. 18-20. Dielasma illinoisensis n. sp. . . . . .p. 267

Pedicle, brachial and lateral views of the holotype. (W. M., No. 14770.)

Chester Group, Paint Creek formation, near Modoc, Randolph County, Illinois.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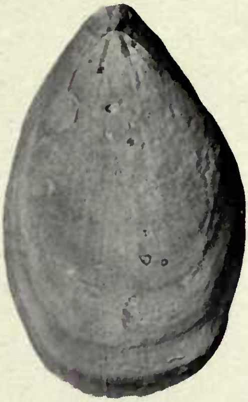
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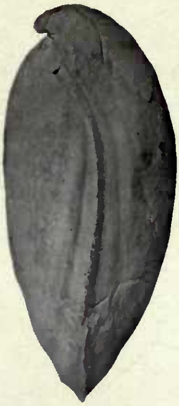
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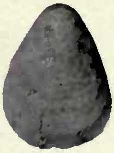
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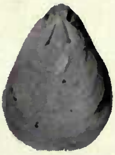
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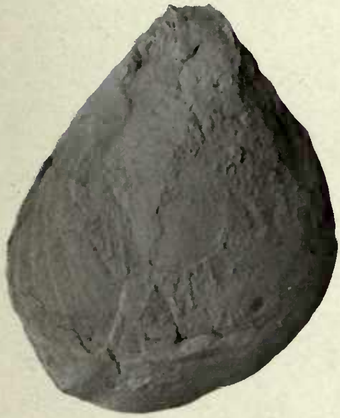
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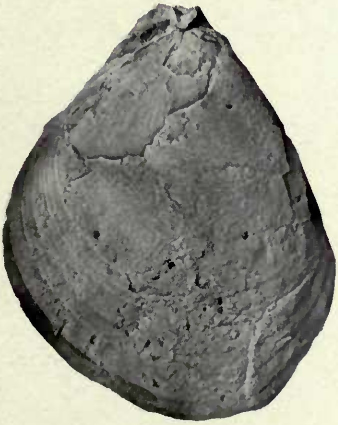
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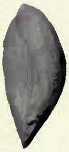
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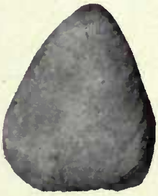
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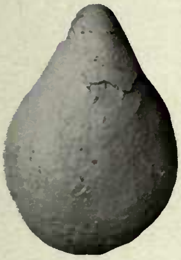
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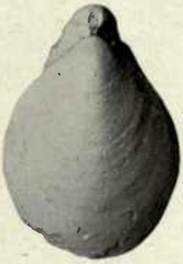
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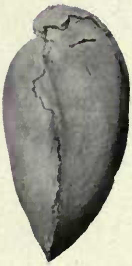
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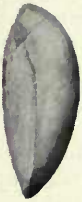
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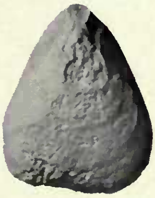
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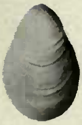
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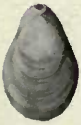
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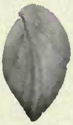
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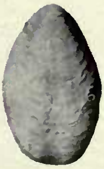
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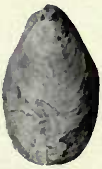
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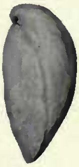
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EXPLANATION OF PLATE XXXIV.

Figs. 1-24. Girtyella indianensis (Girty) .... p. 275

1-9. Pedicle, brachial and lateral views of three nearly perfect examples from the typical locality of the species. (W. M., Nos. 7774 and 14237.)

Pella Beds, Pella, Iowa.

10-11. Pedicle and brachial views of a nearly perfect specimen. (W. M., No. 14338.)

Ste. Genevieve limestone, near Waterloo, Illinois.

12-17. Pedicle, brachial and lateral views of two very perfect specimens probably belonging to this species. (D. K. G., No. 1603.)

Webb City, Jasper Co., Missouri. (Carterville formation?)

18-20. Pedicle, brachial and lateral views of a small specimen. 21-24. Pedicle, brachial, lateral and anterior views of another specimen. (W. M., No. 14800.)

Lower Chester Group, Rosiclare, Illinois.

Figs. 25-36. Girtyella turgida (Hall) .... p. 273

25-27. Pedicle, brachial and lateral views of a large specimen. 28-31. Pedicle, brachial and lateral views of two smaller specimens. (W. M., No. 14234.)

Salem limestone, Bloomington, Indiana.

32-33. Brachial and lateral views of a very convex specimen. 34-36. Pedicle, brachial and lateral views of a small individual. (W. M., No. 14771.)

Salem limestone, Hull's Hollow, Madison Co., Illinois.

Figs. 37-41. Girtyella brevilobata (Swallow) .... p. 278

37-39. Pedicle, brachial and lateral views of a very perfect specimen. (W. M., No. 7786.)

Chester Group, Golconda, Illinois.

40-41. Pedicle and brachial views of an internal cast. Holotype of *Dielasma turgida* var. *elongata* Weller. (W. M., No. 4959.)

Batesville sandstone, Batesville, Arkansas.

Figs. 42-47. Girtyella intermedia n. sp .... p. 276

42-44. Pedicle, brachial and lateral views of a very complete specimen in which the median plication in the brachial valve is well developed. 45-47. Smaller views of another example with the median plication of the brachial valve faintly developed. Cotypes. (W. M., No. 14772.)

Paint Creek Formation, near Modoc, Randolph County, Illinois.

Figs. 48-50. Girtyella cedarensis n. sp .... p. 272

Pedicle, brachial and lateral views of an internal cast, the holotype. The median septum is clearly shown in the brachial view. (D. K. G., No. 1402.)

Northview shale, Cedar Gap, Wright County, Missouri.

Fig. 51. Cranæna (?) allei (Winchell) .... p. 252

View of the holotype, an internal cast of the pedicle valve. (U. M., No. 2004.)

Kinderhook, Bed No. 5, Burlington, Iowa.

Figs. 52-54. CRANÆNA sp.

Pedicle, brachial and lateral views of a nearly complete specimen. (W. M., No. 9716.)

Chouteau limestone, Pettis County, Missouri.

Figs. 55-59. CRANÆNA SULCATA n. sp.................................p. 251

55-57. Pedicle, brachial and lateral views of a very perfect specimen. 58-59. Brachial and anterior views of another example. Cotypes. (W. M., No. 14250.)

Salem limestone, Spergen Hill, Indiana.

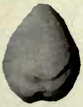
Figs. 60-66. CRANÆNA GLOBOSA n. sp.................................p. 249

Pedicle, brachial and lateral views of a very perfect internal cast. Holotype. (W. M., No. 14249.)

Upper Burlington limestone, Springfield, Missouri.

63-65. Pedicle, brachial and lateral views of another specimen. 66. View of the interior of a shell showing the brachidium. (W. M., No. 14248.)

Burlington white chert, Louisiana, Missouri.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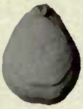
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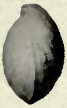
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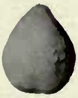
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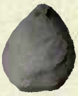
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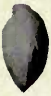
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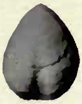
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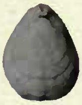
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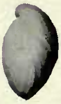
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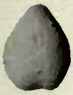
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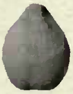
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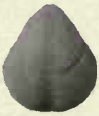
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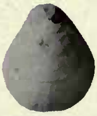
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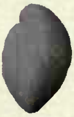
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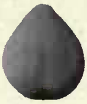
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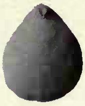
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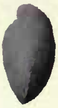
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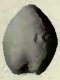
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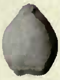
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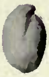
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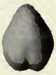
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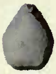
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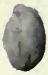
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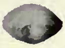
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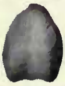
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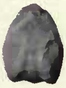
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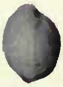
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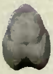
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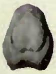
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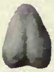
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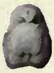
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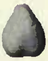
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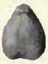
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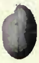
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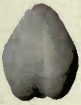
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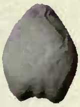
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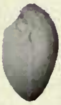
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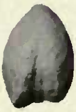
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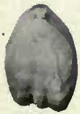
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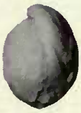
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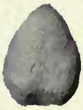
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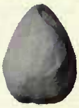
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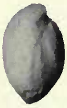
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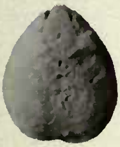
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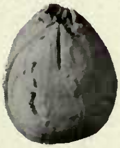
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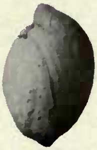
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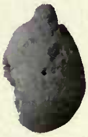
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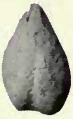
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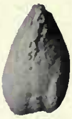
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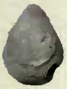
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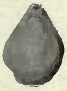
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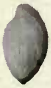
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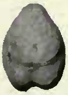
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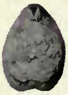
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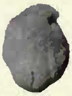
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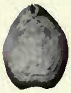
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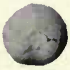
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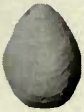
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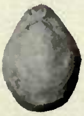
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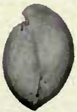
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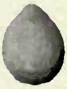
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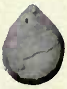
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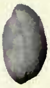
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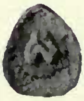
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EXPLANATION OF PLATE XXXV.

Figs. 1-5. Atrypa infrequens n. sp. . . . . .p. 285
1-2. Pedicle and brachial views of the holotype. 3-5. Pedicle, brachial and lateral views of the same specimen enlarged x 2. (W. M., No. 11348.)
Glen Park limestone, Glen Park, Missouri.

Figs. 6-21. Cyrtina acutirostris (Shumard) . . . . .p. 286
6-10. Pedicle, brachial, lateral, anterior and posterior views of a perfect specimen. 11-15. Similar views of another specimen. 16-20. Similar views of a third example. 21. View of the interior of a pedicle valve showing the median septum. (W. M., No. 6691.)
Louisiana limestone, Louisiana, Missouri.

Figs. 22-31. Cyrtina burlingtonensis Rowley. . . . . .p. 288
22-26. Pedicle, brachial, lateral, anterior and posterior views of a perfect specimen. (W. M., No. 9676.)
Chouteau limestone, Pettis County, Missouri.
27-30. Pedicle, brachial, lateral and anterior views of the holotype. (R. R. R.)
Burlington white chert, Louisiana, Missouri.
31. View of an internal cast of a pedicle valve showing the median septum as a slit. (R. R. R.)
Burlington chert, Louisiana, Missouri.

Figs. 32-38. Cyrtina neogenes Hall and Clarke. . . . . .p. 289
32-36. Pedicle, brachial, anterior, posterior and lateral views of a nearly complete internal cast. 37-38. Views of two internal casts of pedicle valves. (W. M., No. 5638.)
Residual chert, Springfield, Missouri.

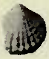
Figs. 39-40. Spiriferina sp.
Pedicle and brachial views of a somewhat crushed specimen. (W. M., No. 7531.)
Keokuk limestone, Keokuk, Iowa.

Figs. 41-49. Spiriferina transversa (McChesney) . . . . .p. 297
41-44. Pedicle, brachial, anterior and posterior views of a very perfect specimen. 45-48. Similar views of another example. 49. View of the interior of a pedicle valve showing the dental lamellæ and median septum. (W. M., No. 7507.)
Chester Group, Chester, Illinois.

Figs. 50-58. Spiriferina spinosa (Norwood and Pratten) . . . . .p. 299
50-53. Pedicle, brachial, anterior and posterior views of a nearly perfect specimen. (W. M., No. 7496.)
Chester Group, Randolph County, Illinois.
54-58. Pedicle, brachial, anterior, posterior and lateral views of another specimen. (W. M., No. 7498.)
Chester Group, Monroe County, Illinois.

Figs. 59-63. SPIRIFERELLA (?) SCHUCHERTI (Rowley)............... .p. 416
Pedicle, brachial, lateral, posterior and anterior views of a very perfect specimen. Metatype. (R. R. R.)
Burlington white chert, Louisiana, Missouri.

Figs. 64-72. ACANTHOSPIRA ACICULIFERA (Rowley)...................p. 418
64-67. Pedicle, brachial, lateral and anterior views of the holotype.
68-71. Pedicle, brachial, lateral, posterior and anterior views of the same specimen enlarged (x 4). (R. R. R.)
Louisiana limestone, Louisiana, Missouri.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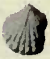
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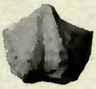
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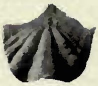
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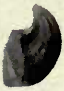
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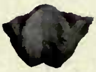
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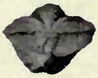
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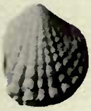
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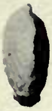
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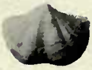
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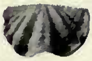
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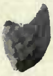
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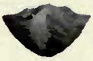
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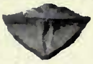
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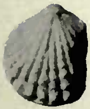
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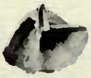
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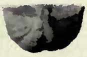
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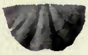
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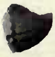
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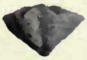
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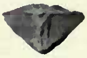
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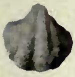
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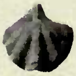
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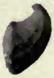
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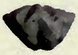
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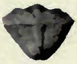
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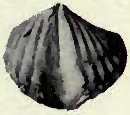
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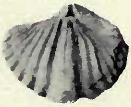
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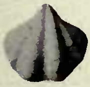
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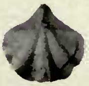
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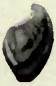
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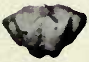
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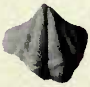
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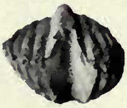
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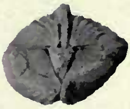
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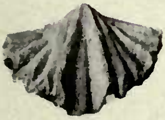
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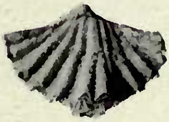
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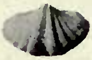
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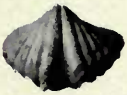
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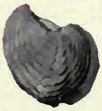
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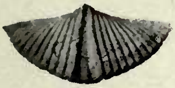
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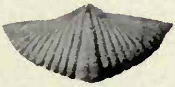
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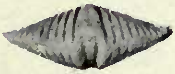
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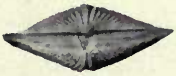
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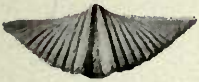
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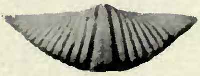
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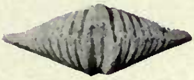
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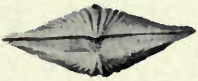
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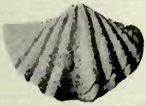
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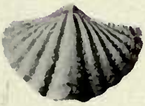
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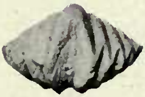
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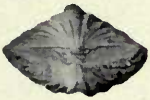
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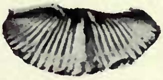
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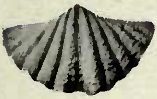
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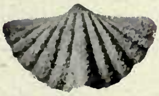
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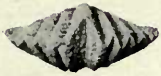
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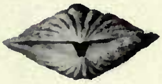
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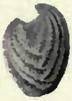
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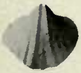
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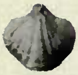
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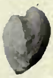
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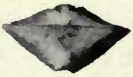
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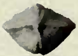
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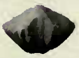
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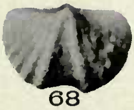
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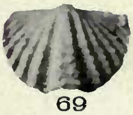
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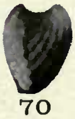
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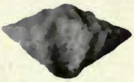
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EXPLANATION OF PLATE XXXVI.

Figs. 1-5. Spiriferina salemensis n. sp................................p. 296

Pedicle, brachial, lateral, posterior and anterior views of the holotype. (W. M., No. 13948.)

Salem limestone, Bloomington, Indiana.

Figs 6-7. Delthyris clarksvillensis (Winchell).....................p. 301

6. View of a pedicle valve. 7. Brachial view of a somewhat crushed specimen. (W. M., No. 6699.)

Louisiana limestone, Louisiana, Missouri.

Fig. 8. Delthyris suborbicularis Weller...............................p. 303

View of a pedicle valve, the holotype. (W. M., No. 11352.)

Glen Park limestone, Glen Park, Missouri.

Figs. 9-14. Delthyris missouriensis Weller..........................p. 302

9. View of a pedicle valve. 10. View of a brachial valve. (W. M., No. 14276.)

Hamburg oolite, Calhoun County, Illinois.

11-12. Views of two pedicle valves. 13-14. Views of two brachial valves. Cotypes. (W. M., No. 11351.)

Glen Park limestone, Glen Park, Missouri.

Figs. 15-24. Delthyris novamexicana (Miller)......................p. 304

15-16. Views of two imperfect pedicle valves. 17. Posterior view of an incomplete specimen. Cotypes of *S. magnicostata* Weller. (W. M., No. 4690.)

Fern Glen formation, near Kimmswick, Missouri.

18-19. Pedicle and posterior views of an incomplete specimen. 20-21. Pedicle and brachial views of a smaller incomplete specimen. 22-24. Pedicle, anterior and posterior views of a third specimen. (D. K. G.)

Lake Valley beds, Lake Valley, New Mexico.

Figs. 25-34. Spiriferina solidirostris White..........................p. 292

25. View of a pedicle valve. 26-27. Views of two brachial valves. 28. Brachial view of a somewhat crushed specimen. Cotypes. (U. M., No. 1372.)

Kinderhook, Bed No. 7, Burlington, Iowa.

29. View of the interior of a pedicle valve showing the median septum. 30. View of a pedicle valve. 31-32. Pedicle and posterior views of a pedicle valve. 33-34. Views of two imperfect brachial valves. (W. M., No. 13949.)

Kinderhook, Le Grand, Iowa.

Figs. 35-40. Spiriferina subtexta White...............................p. 291

35-39. Pedicle, brachial, anterior, posterior and lateral views of the holotype. (U. M., No. 1701.)

Burlington limestone, Burlington, Iowa.

40. View of a pedicle valve. (W. M., No. 13914.)

Fern Glen formation, near Kimmswick, Missouri.

Figs. 41-48. SPIRIFERINA NORWOODANA (Hall)........................p. 295

41-44. Posterior, lateral, brachial and pedicle views of a nearly perfect specimen (x 4). 45-48. Pedicle, brachial, lateral and anterior views of a nearly perfect specimen. (x 4.) (W. M., No. 5636.)

Salem limestone, Bloomington, Indiana.

Figs. 49-53. DELTHYRIS SIMILIS n. sp................................p. 305

Pedicle, brachial, anterior, lateral and posterior views of a nearly perfect internal cast, the holotype. (D. K. G., No. 2903.)

Residual chert, South Branch, Callaway Co., Missouri.

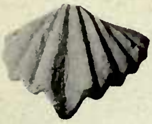
Figs. 54-57. SPIRIFERINA SUBELLIPTICA (McChesney)..................p. 294

54-55. Pedicle and brachial views of a sulphur cast of the holotype. (W. M., No. 13239.)

Button Mould Knob, Kentucky.

56. View of a pedicle valve. 57. View of the interior of a pedicle valve showing the median septum. (W. M., No. 13427.)

Lebanon, Kentucky.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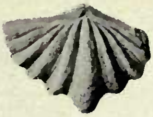
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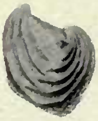
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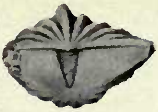
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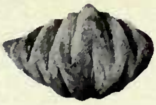
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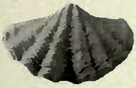
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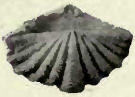
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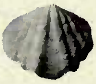
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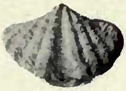
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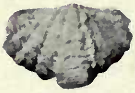
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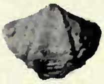
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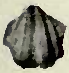
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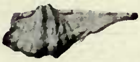
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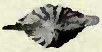
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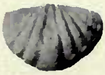
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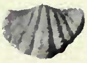
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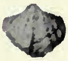
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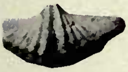
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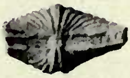
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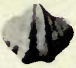
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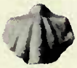
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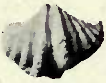
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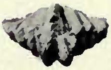
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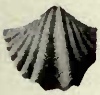
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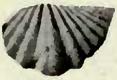
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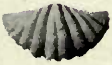
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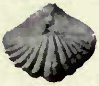
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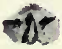
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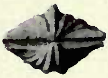
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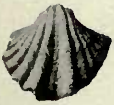
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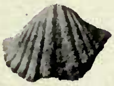
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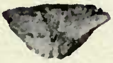
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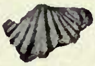
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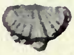
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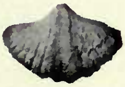
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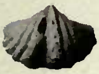
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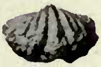
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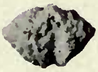
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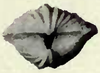
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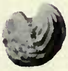
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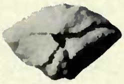
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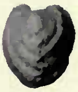
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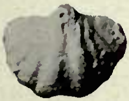
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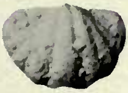
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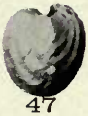
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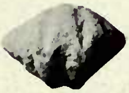
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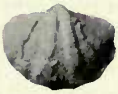
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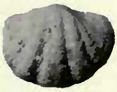
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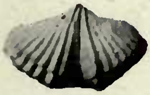
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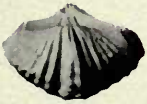
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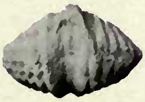
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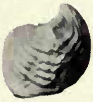
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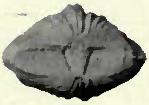
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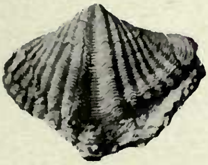
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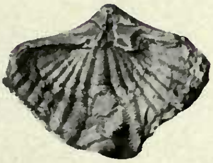
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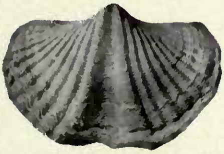
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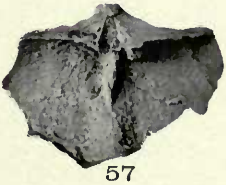
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EXPLANATION OF PLATE XXXVII.

Figs. 1-7. SPIRIFER MARIONENSIS Shumard ....p. 308

1-5. Pedicle, brachial, anterior, posterior and lateral views of a nearly perfect specimen. (W. M., No. 6700.)

Louisiana limestone, Clarksville, Missouri.

6. View of a pedicle valve with much extended hinge-line. (W. M., No. 13335.) 7. Brachial view of a specimen with very short hinge-line. (W. M., No. 6694.)

Louisiana limestone, Louisiana, Missouri.

Figs. 8-17. SPIRIFER VERNONENSIS Swallow ....p. 310

8-12. Posterior, pedicle, brachial, anterior and lateral views of a very perfect specimen. 13. View of a large pedicle valve. (W. M., No. 4686.)

Fern Glen formation, near Kimmswick, Missouri.

14-17. Pedicle, brachial, anterior and posterior views of a nearly perfect specimen. (W. M., No. 13535.)

Fern Glen formation, Fern Glen, Missouri.

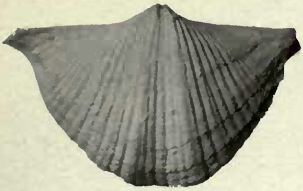
Figs. 18-21. SPIRIFER OSAGENSIS Swallow ....p. 314

18-19. Views of two imperfect pedicle valves. 20. View of a brachial valve. (W. M., No. 13545.)

Hannibal sandstone, Louisiana, Missouri.

21. View of a brachial valve. (W. M., No. 5957.)

Northview sandstone, Northview, Missouri.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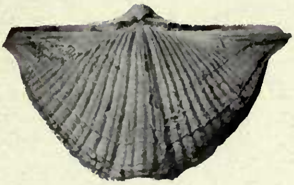
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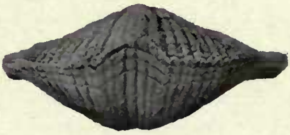
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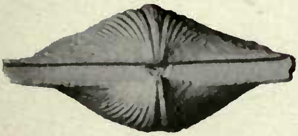
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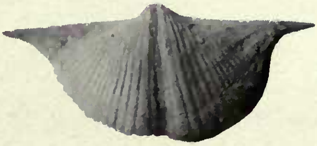
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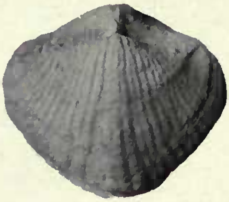
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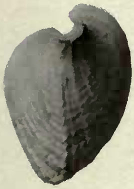
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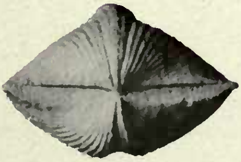
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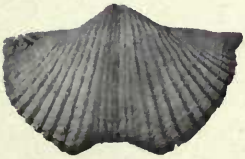
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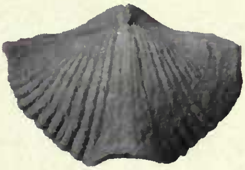
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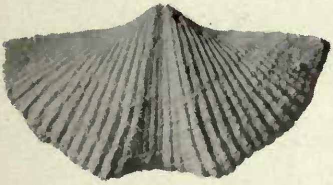
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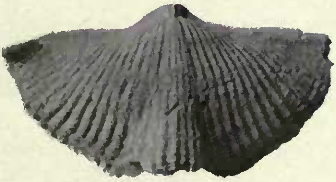
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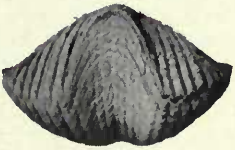
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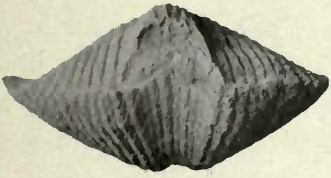
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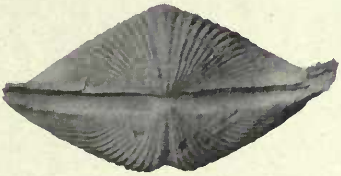
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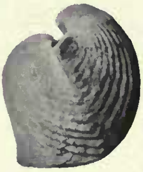
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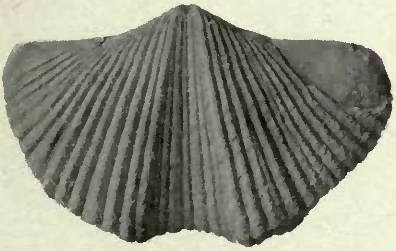
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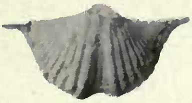
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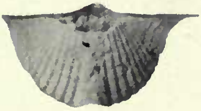
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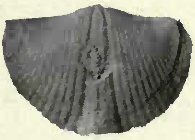
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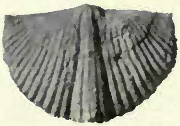
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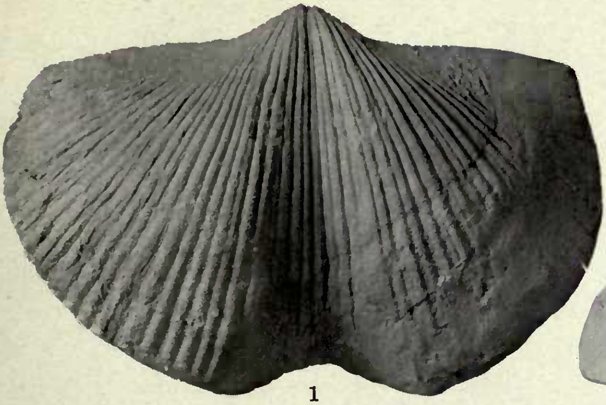
EXPLANATION OF PLATE XXXVIII.

Figs. 1-5. SPIRIFER PIKENSIS Rowley .... p. 312
Pedicle, brachial, anterior, posterior and lateral views of the holotype. (R. R. R.)
Burlington limestone, Louisiana, Missouri.

Figs. 6-8. SPIRIFER SHEPARDI n. sp .... p. 313
6-7. Views of two pedicle valves. 8. View of a brachial valve. Cotypes. (W. M., No. 8540.)
Pierson limestone, near Springfield, Missouri.

Figs. 9-13. SPIRIFER LATIOR Swallow .... p. 316
Lateral, pedicle, brachial, anterior and posterior views of a nearly perfect specimen. (W. M., No. 6707.)
Chouteau limestone, Chouteau Springs, Missouri.



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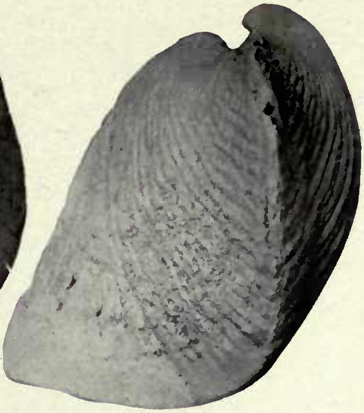

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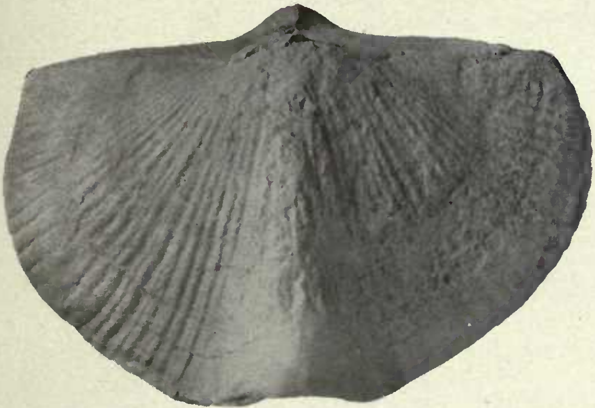

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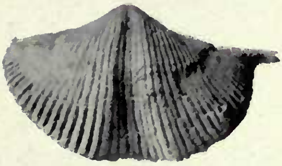

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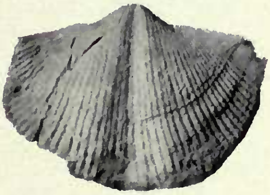

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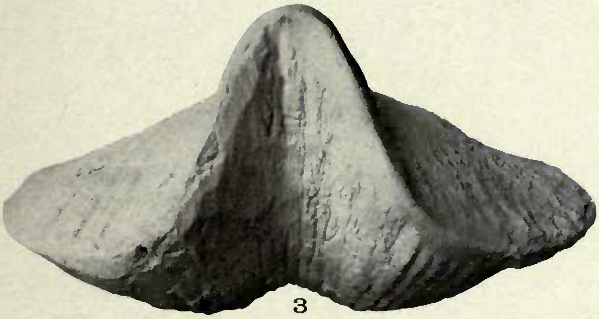

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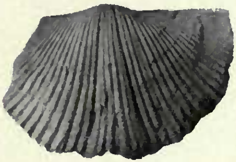

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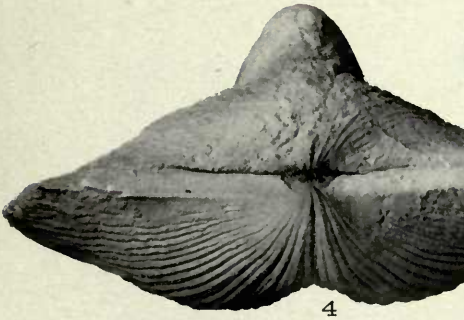

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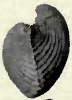

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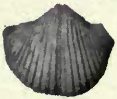

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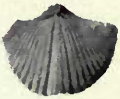

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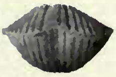

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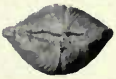

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EXPLANATION OF PLATE XXXIX.

Figs. 1-10. Spirifer platynotus n. sp................................p. 317

1. View of a pedicle valve. 2. View of a brachial valve. (W. M., No. 6674.) 3-5. Views of three pedicle valves. 6. View of a brachial valve. Cotypes. (W. M., No. 13544.)

Kinderhook, Bed No. 6, Burlington, Iowa.

7-10. Pedicle, brachial, anterior and lateral views of a nearly perfect specimen probably belonging to this species. (W. M., No. 7502.)

Kinderhook, Bed No. 5, Burlington, Iowa.

Figs. 11-23. Spirifer missouriensis Swallow........................p. 319

11-14. Posterior, lateral, pedicle and brachial views of a nearly perfect example showing the distinct fasciculation of the plications. (W. M., No. 10719.)

Chouteau limestone, Pettis County, Missouri.

15-18. Pedicle, brachial, anterior and posterior views of a nearly perfect specimen. 19-23. Posterior, lateral, pedicle, brachial and anterior views of a large specimen somewhat restored at the cardinal extremities. (W. M., No. 9663.)

Chouteau limestone, Chouteau Springs, Missouri.

Figs. 24-26. Spirifer biplicatus Hall.................................p. 320

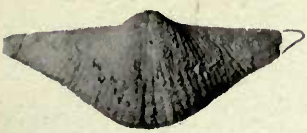
24-25. Views of two internal casts of pedicle valves. 26. View of the internal cast of a brachial valve. (W. M., No. 5931.)

Chonopectus sandstone, Burlington, Iowa.

Figs. 27-30. Spirifer biplicoides n. sp................................p. 323

27. View of a plaster cast of the pedicle valve from a natural mould. 28. View of the internal cast of a brachial valve. (W. M., No. 6660.) 29. View of a plaster cast from a natural mould of the pedicle valve. (W. M., No. 14785.) 30. View of the internal cast of a brachial valve. (W. M., No. 14755.)

Kinderhook, Bed No. 5, Burlington, Iowa.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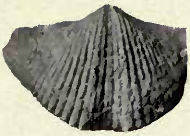
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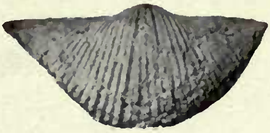
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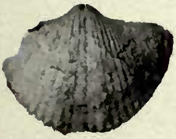
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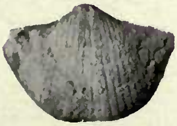
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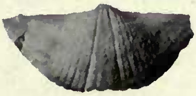
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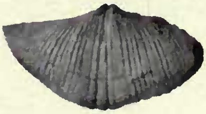
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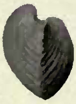
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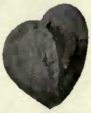
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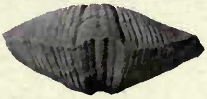
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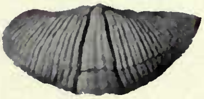
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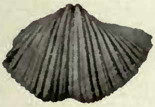
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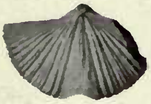
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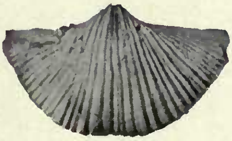
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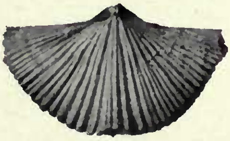
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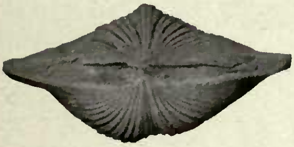
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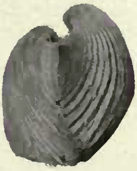
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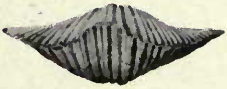
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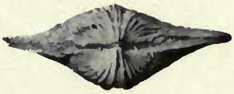
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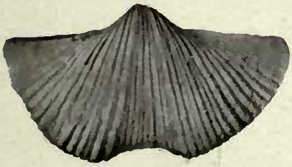
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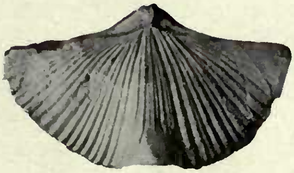
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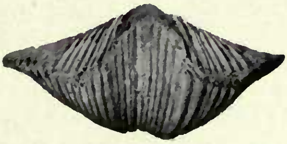
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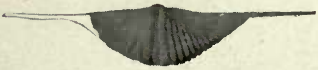
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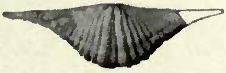
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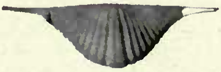
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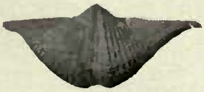
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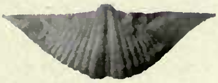
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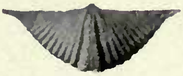
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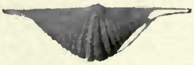
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EXPLANATION OF PLATE XL.

Figs. 1-23. Spirifer louisianensis Rowley..........................p. 322

1-5. Pedicle, brachial, lateral, anterior and posterior views of a nearly complete specimen. 6-10. Similar views of another specimen. 11-13. Brachial, lateral and posterior views of another specimen. (W. M., No. 5632.)

Chouteau limestone, Green County, Missouri.

14-15. Views of two pedicle valves. (W. M., No. 14153.)

Head of Middle River, Callaway County, Missouri.

16-19. Pedicle, brachial, lateral and anterior views of a nearly perfect specimen. 20-23. Pedicle, brachial, lateral and posterior views of a nearly perfect specimen. Metatypes. (R. R. R.)

Burlington white chert, Louisiana, Missouri.

Figs. 24-29. Spirifer legrandensis n. sp.............................p. 326

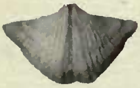
24-28. Pedicle, brachial, anterior, lateral and posterior views of a very perfect specimen. 29. View of a pedicle valve. Cotypes. (W. M., No. 10720.)

Kinderhook, LeGrand, Iowa.

Figs. 30-34. Spirifer insculptus Rowley............................p. 324

Pedicle, anterior, posterior, lateral and brachial views of a nearly perfect specimen. (W. M., No. 13551.)

Base of Burlington limestone, Fern Glen, Missouri.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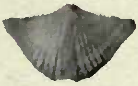
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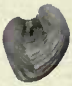
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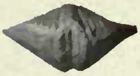
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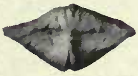
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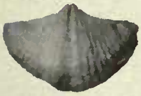
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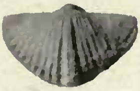
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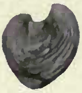
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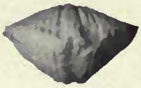
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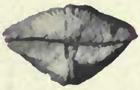
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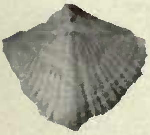
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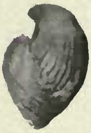
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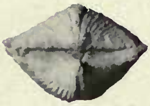
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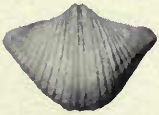
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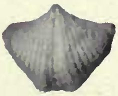
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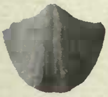
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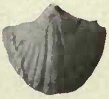
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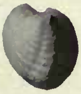
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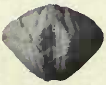
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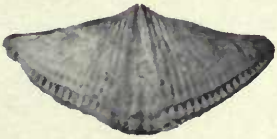
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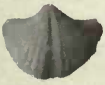
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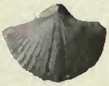
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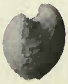
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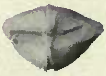
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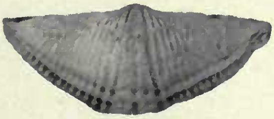
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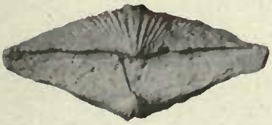
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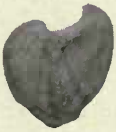
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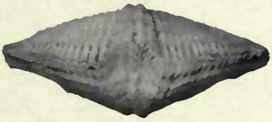
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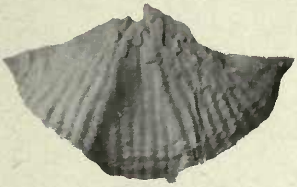
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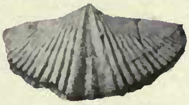
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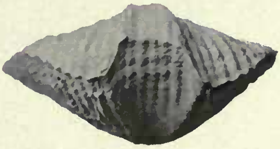
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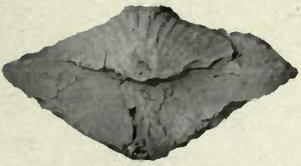
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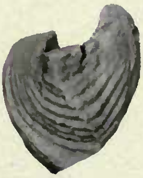
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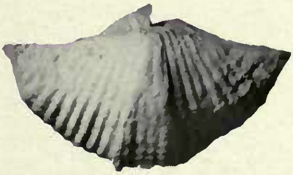
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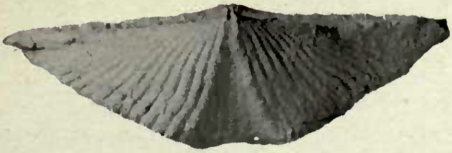
EXPLANATION OF PLATE XLI.

Figs. 1-5. Spirifer insculptus Rowley..............................p. 324
Pedicle, brachial, posterior, anterior and lateral views of the holotype. (R. R. R.)
Lower Burlington limestone, Louisiana, Missouri.

Figs. 6-14. Spirifer incertus Hall..................................p. 335
6. View of a nearly perfect pedicle valve. (W. M., No. 13529.) 7-11. Lateral, pedicle, brachial, posterior and anterior views of a nearly perfect specimen. (W. M., No. 8620.) 12-14. Brachial, posterior and pedicle views of the holotype. (A. M. N. H., No. 5111—1.)
Burlington limestone, Burlington, Iowa.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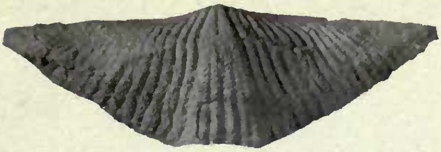
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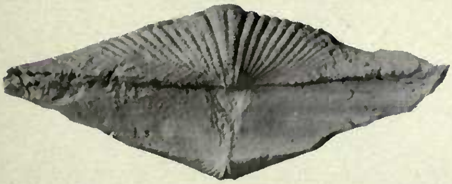
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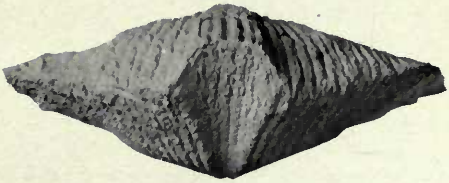
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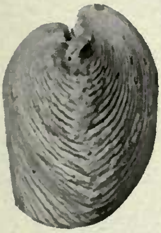
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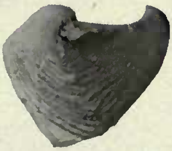
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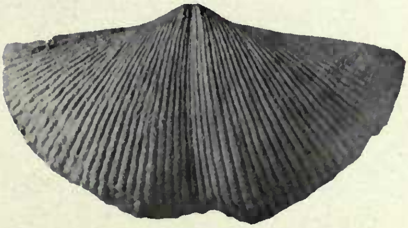
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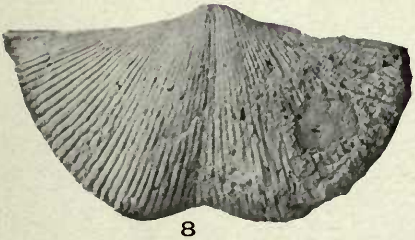
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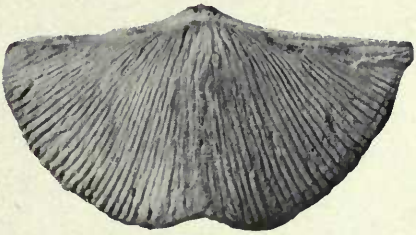
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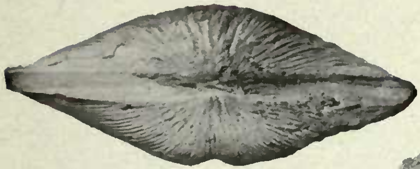
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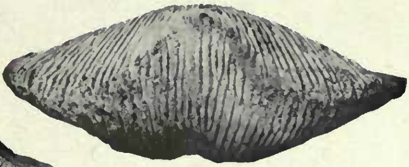
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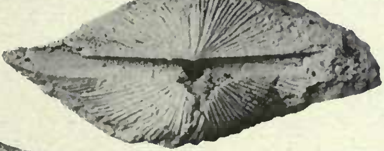
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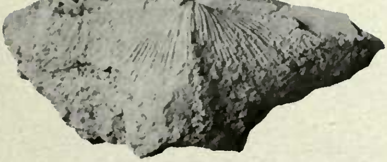
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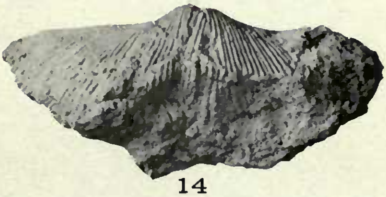
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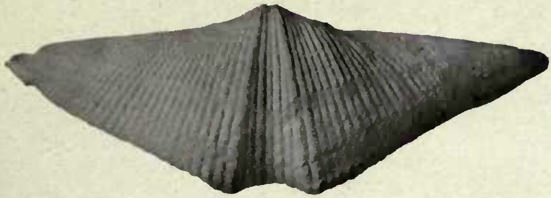
EXPLANATION OF PLATE XLII.

Figs. 1-3. Spirifer forbesi Norwood and Pratten....................p. 331
Pedicle, brachial and posterior views of a nearly perfect specimen probably belonging to this species. (R. R. R.)
Burlington white chert, Louisiana, Missouri.

Figs. 4-16. Spirifer tenuicostatus Hall...........................p. 328
4. View of a pedicle valve. 5-9. Pedicle, brachial, anterior, posterior and lateral views of a nearly perfect specimen. Cotypes. (A. M. N. H., No. 5121—1 & 2.)
Warsaw formation, Dallas and Warsaw, Illinois.
10-13. Pedicle, brachial, posterior and anterior views of a somewhat distorted specimen. (W. M., No. 7506.)
Keokuk limestone, Bentonsport, Iowa.
14-16. Lateral, pedicle and brachial views of a somewhat crushed specimen. (W. M., No. 7505.)
Warsaw formation, Warsaw, Illinois.

Figs. 17-21. Spirifer jeffersonensis Weller.......................p. 369
17-18. Pedicle and posterior views of an incomplete pedicle valve. 19-21. Views of three brachial valves. Cotypes. (W. M., No. 11350.)
Glen Park limestone, Glen Park, Missouri.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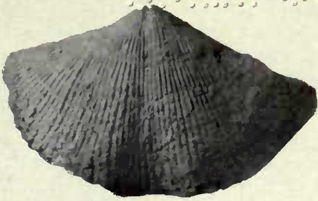
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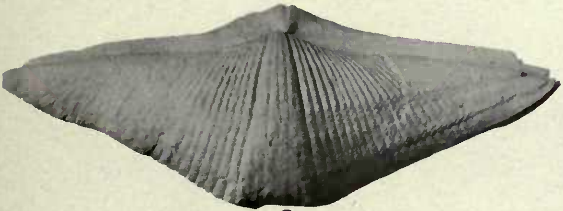
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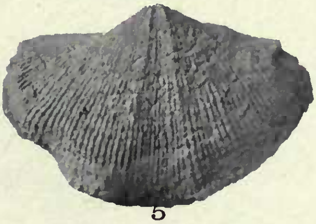
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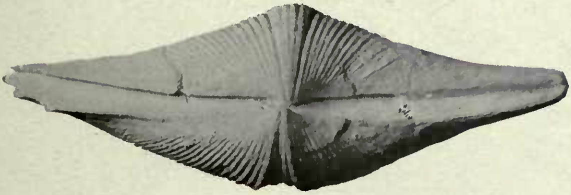
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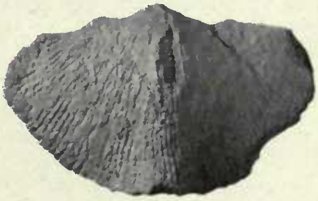
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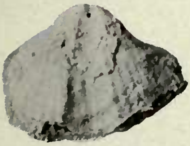
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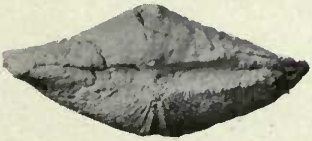
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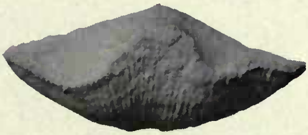
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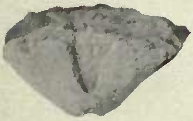
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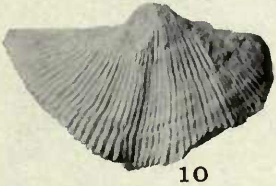
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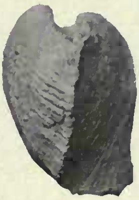
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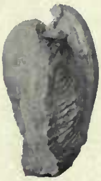
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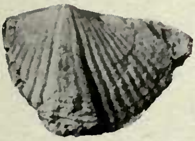
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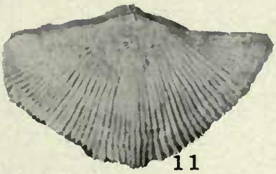
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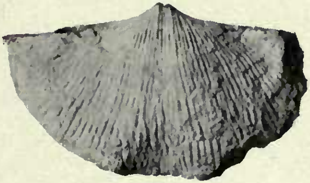
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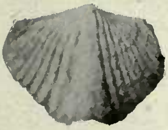
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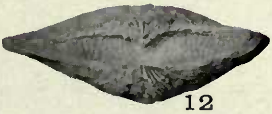
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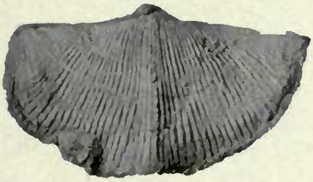
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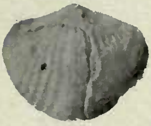
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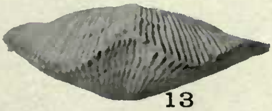
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EXPLANATION OF PLATE XLIII.

Figs. 1-10. Spirifer subæqualis Hall .... p. 327

1-5. Pedicle, brachial, posterior, anterior and lateral views of a nearly perfect specimen. (D. K. G., No. 3501.)
Webb City, Jasper Co., Missouri.

6-10. Pedicle, brachial, lateral, posterior and anterior views of a sulphur cast of the holotype. (W. M., No. 14773.)
Warsaw limestone, Warsaw, Illinois.

Figs. 11-15. Spirifer lateralis Hall .... p. 330

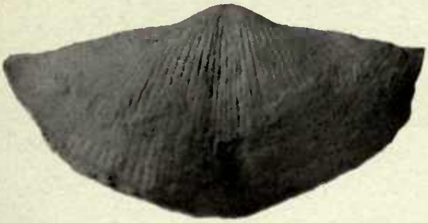
Pedicle, brachial, posterior, anterior and lateral views of the holotype. (W. M., No. 8619.)
Clifton, Madison County, Illinois.

Fig. 16. Spirifer forbesi Norwood and Pratten .... p. 331

View of a pedicle valve. (W. M., No. 13549.)
Burlington limestone, Pettis County, Missouri.

Fig. 17. Spirifer imbrex Hall .... p. 334

View of a brachial valve, the holotype. (A. M. N. H., 5110—1.)
Burlington limestone, Burlington, Iowa.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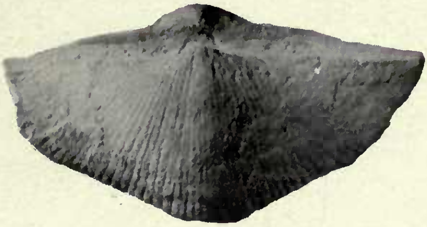
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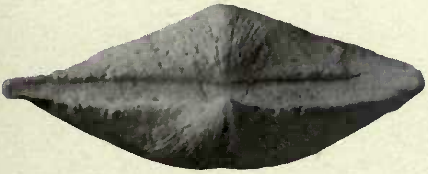
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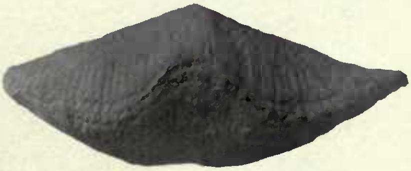
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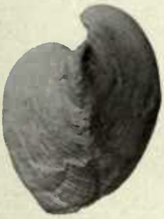
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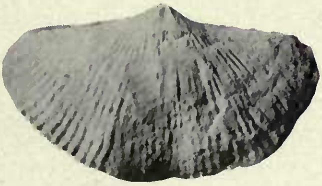
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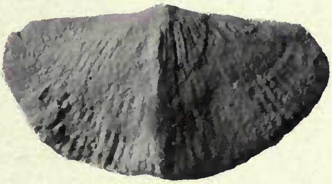
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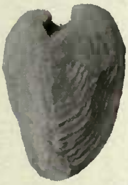
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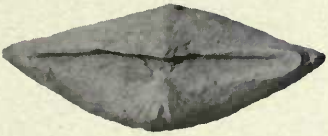
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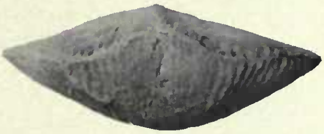
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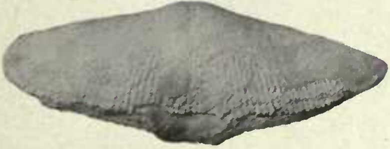
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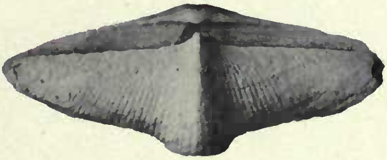
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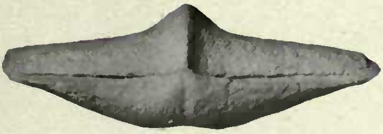
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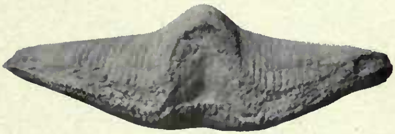
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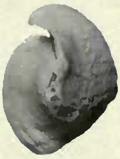
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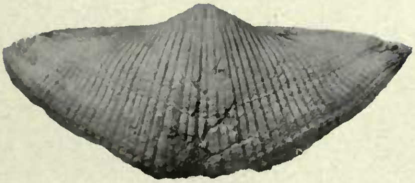
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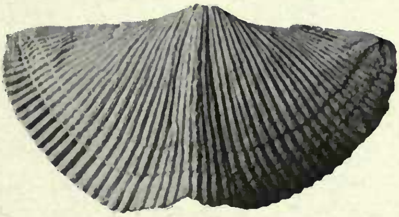
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EXPLANATION OF PLATE XLIV.

Figs. 1-14. Spirifer washingtonensis n. sp. . . . . .p. 339

1-4. Pedicle, brachial, lateral and posterior views of a nearly complete specimen. 5-7. Posterior, pedicle and anterior views of another specimen. 8-9. Brachial and lateral views of a third specimen. Cotypes. (W. M., No. 13550.)

Keokuk limestone, Monroe County, Illinois.

10-12. Anterior, pedicle and brachial views of a nearly complete specimen. Cotypes. (W. M., No. 7522.)

Keokuk limestone, Spergen Hill, Indiana.

13-14. Pedicle and brachial views of a nearly complete specimen. Cotypes. (W. M., No. 13577.)

Keokuk limestone, Salem, Indiana.

Figs. 15-19. Spirifer mundulus Rowley. . . . . .p. 333

15-18. Pedicle, brachial, posterior and anterior views of a very perfect shell. Metatype. (R. R. R.)

Burlington white chert, Louisiana, Missouri.

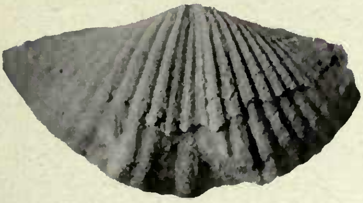
19. View of an incomplete pedicle valve. (W. M., No. 5635.)

Burlington limestone, near Springfield, Missouri.

Figs. 20-24. Spirifer breckenridgensis n. sp. . . . . .p. 342

20-22. Brachial, lateral and anterior views of a very perfect specimen. 23-24. Pedicle and posterior views of another specimen. (D. K. G., No. 3302.)

Chester Group, Breckenridge County, Kentucky.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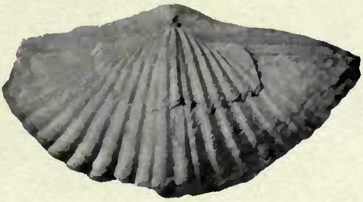
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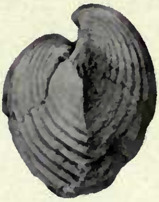
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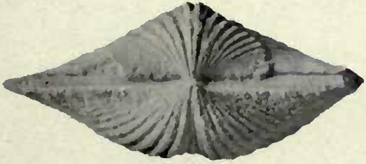
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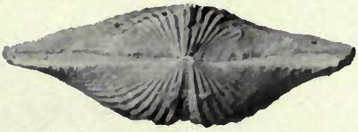
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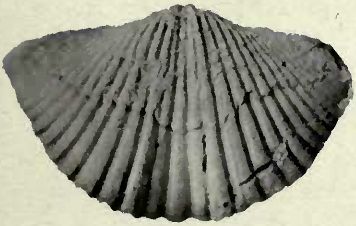
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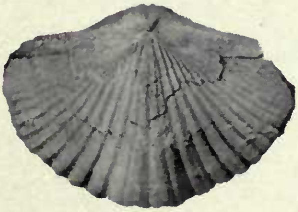
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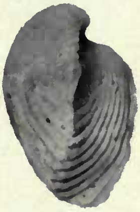
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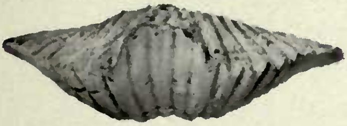
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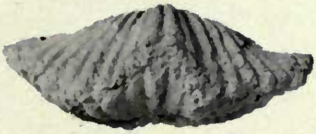
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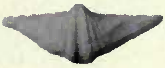
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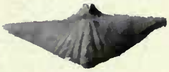
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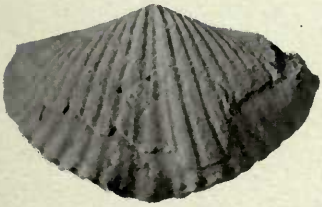
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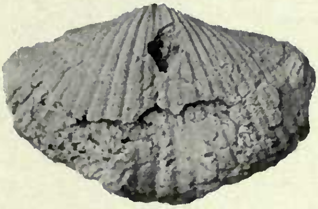
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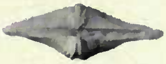
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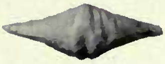
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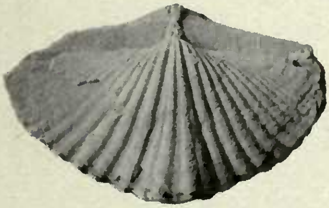
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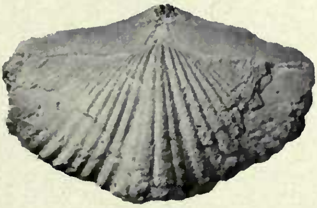
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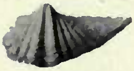
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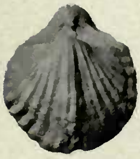
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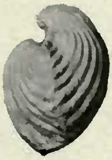
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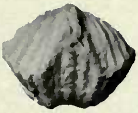
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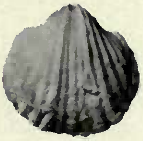
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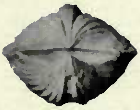
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EXPLANATION OF PLATE XLV.

Figs. 1-31. Spirifer pellaensis n. sp.................................p. 340

1-3. Pedicle, brachial and anterior views of a large specimen. 4-7. Pedicle, brachial, posterior and anterior views of another specimen. 8-9. Pedicle and brachial views of a very large specimen. 10-11. Brachial and anterior views of a nearly perfect specimen. 12-14. Brachial, pedicle and lateral views of a nearly perfect specimen. (W. M., No. 13571.)

Pella Beds, Pella, Iowa.

15-16. Posterior and anterior views of a specimen with a short hinge-line. (W. M.)

Pella Beds, Iowa.

17-18. Pedicle and brachial views of a nearly perfect specimen. 19-21. Lateral, brachial and pedicle views of a nearly perfect specimen. (W. M., No. 5771.)

Pella Beds, Fort Dodge, Iowa.

22-23. Brachial and posterior views of a nearly perfect specimen, the holotype. 24-25. Posterior and lateral views of another specimen. (W. M., No. 7535.)

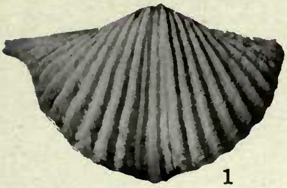
Pella Beds, Keosauqua, Iowa.

26-27. Pedicle and brachial views of a nearly perfect specimen. 28-29. Pedicle and brachial views of another specimen. (W.M., No. 7247.)

Maxville limestone, Fayette County, Pennsylvania.

30. View of an internal cast of a pedicle valve. 31. View of an internal cast of a brachial valve. (W. M., No. 338.)

Residual chert, Springfield, Missouri.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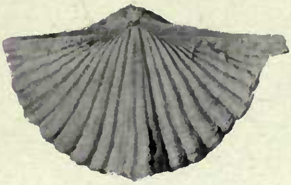
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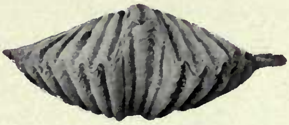
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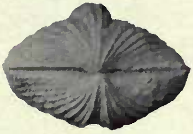
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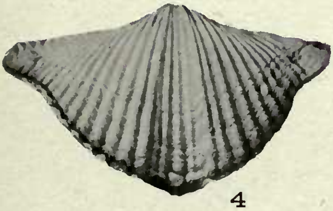
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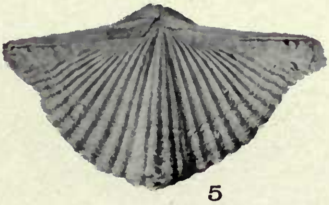
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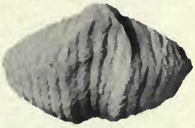
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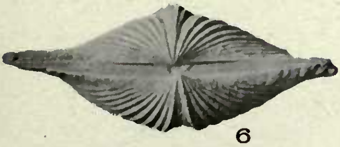
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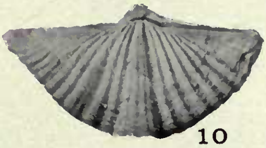
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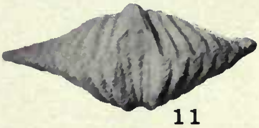
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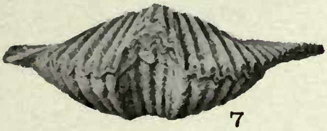
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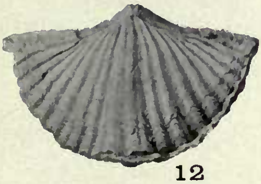
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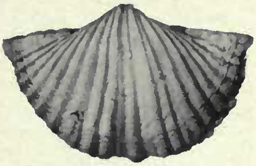
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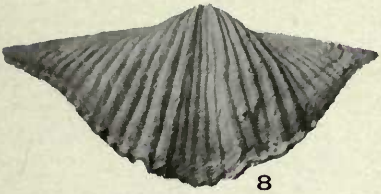
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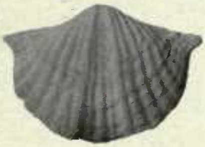
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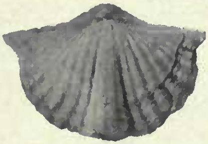
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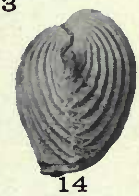
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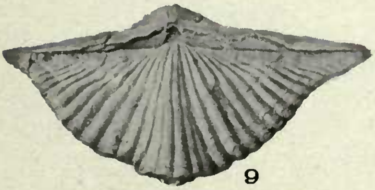
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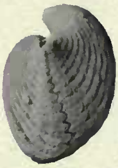
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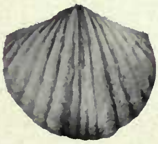
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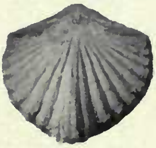
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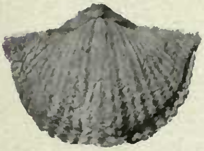
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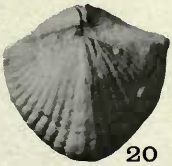
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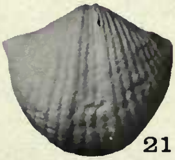
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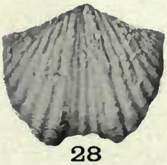
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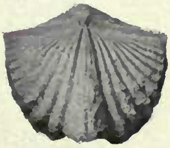
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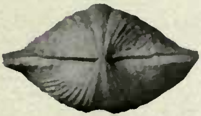
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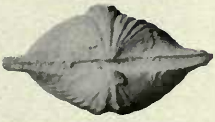
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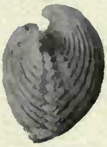
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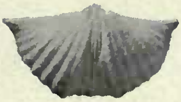
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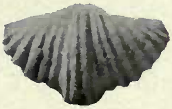
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EXPLANATION OF PLATE XLVI.

Figs. 1-12. SPIRIFER INCREBESCENS Hall..............................p. 343

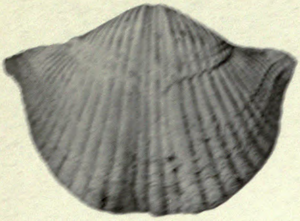
1-5. Pedicle, brachial, lateral, posterior and anterior views of a very perfect specimen. 6-9. Pedicle, brachial, posterior and anterior views of another specimen. 10-12. Pedicle, brachial and anterior views of a smaller specimen. (W. M., No. 7509.)

Chester Group, Chester, Illinois.

Figs. 13-17. SPIRIFER CARINATUS Rowley..............................p. 336

Lateral, pedicle, brachial, posterior and anterior views of a nearly complete specimen. Metatype. (R. R. R.)

Lower Burlington limestone, Louisiana, Missouri.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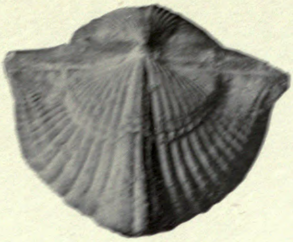
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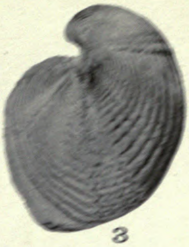
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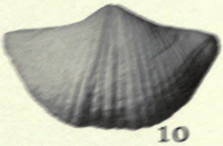
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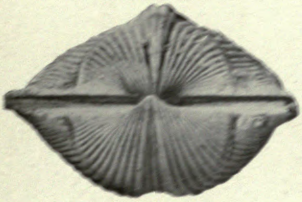
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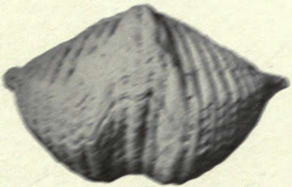
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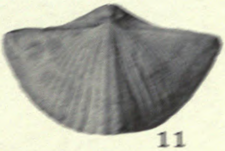
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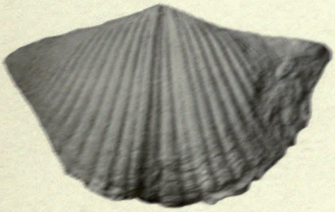
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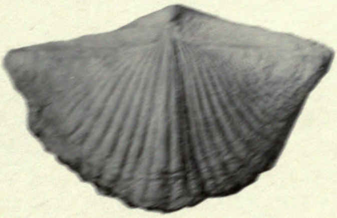
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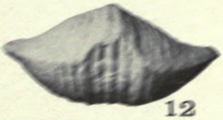
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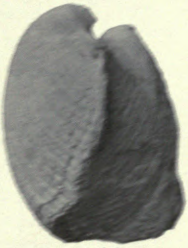
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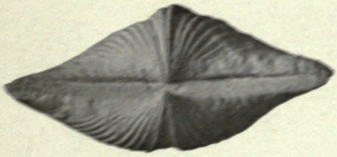
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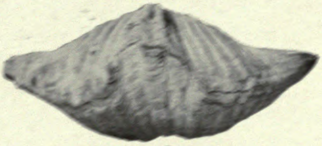
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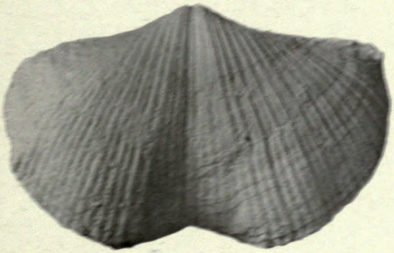
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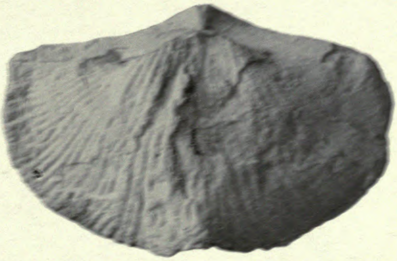
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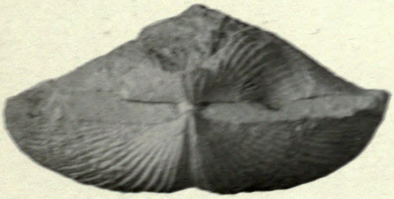
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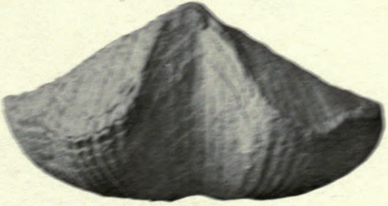
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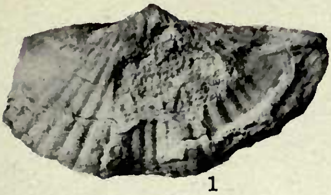
EXPLANATION OF PLATE XLVII.

Figs. 1-5. Spirifer crawfordsvillensis n. sp.........................p. 338
Pedicle, brachial, lateral, posterior and anterior views of the holotype. (W. M., No. 13528.)
Crawfordsville shale, Crawfordsville, Indiana.

Figs. 6-16. Spirifer bifurcutus Hall.................................p. 346
6-8. Pedicle, posterior and lateral views of a nearly complete specimen. 9-10. Views of two pedicle valves. (W. M., No. 14784.)
Salem limestone, Hull's Hollow, near Alton, Illinois.
11-14. Pedicle, brachial, anterior and lateral views of a nearly perfect specimen. 15-16. Brachial and lateral views of another specimen. (W. M., No. 7530.)
Salem limestone, Spergen Hill, Indiana.

Figs. 17-31. Spirifer leidyi Norwood and Pratten..................p. 345
17-19. Pedicle, brachial and anterior views of a very perfect specimen. 20-22. Brachial, posterior and lateral views of a large specimen. 23-27. Pedicle, brachial, anterior, posterior and lateral views of a perfect specimen. 28-29. Pedicle and brachial views of another example. 30-31. Lateral and brachial views of a nearly perfect specimen. (W. M., No. 7511.)
Chester Group, Chester, Illinois.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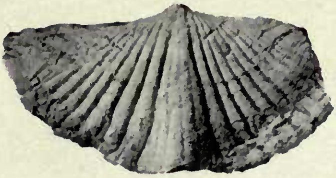
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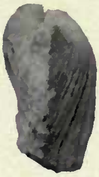
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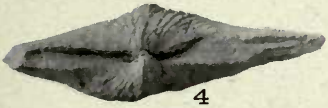
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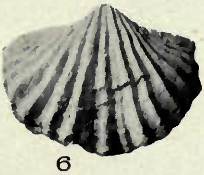
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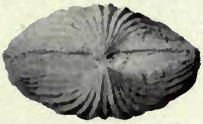
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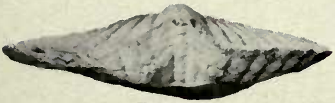
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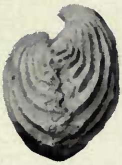
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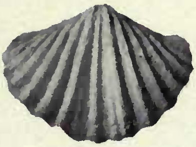
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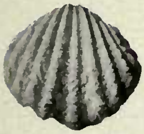
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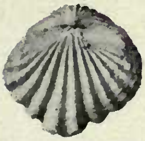
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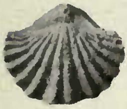
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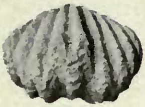
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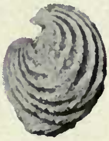
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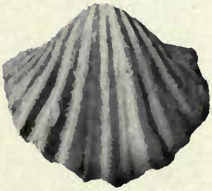
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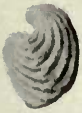
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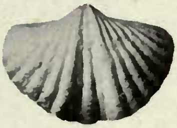
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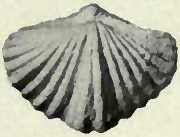
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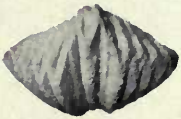
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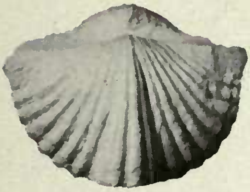
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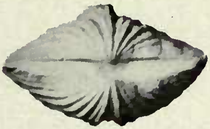
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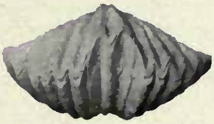
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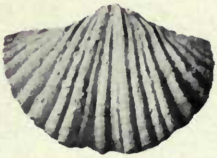
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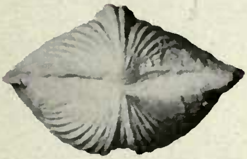
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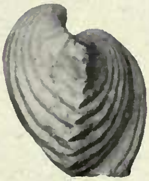
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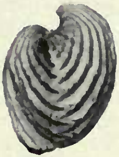
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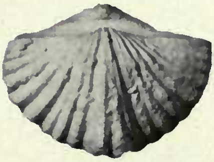
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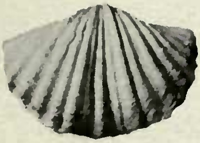
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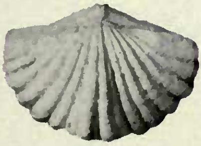
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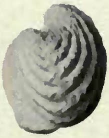
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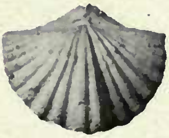
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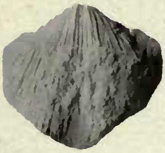
EXPLANATION OF PLATE XLVIII.

Figs. 1-5. Spirifer tenuimarginatus Hall .... p. 355
Pedicle, brachial, lateral, posterior and anterior views of a sulphur cast of the holotype. (W. M., No. 14774.)
Keokuk limestone, Warsaw, Illinois.

Figs. 6-16. Spirifer rostellatus Hall .... p. 353
6-10. Pedicle, brachial, posterior, anterior and lateral views of the holotype. (W. M., No. 6930.)
Keokuk limestone, Warsaw, Illinois.
11-14. Pedicle, brachial, anterior and lateral views of an internal cast of a rather broad specimen. (D. K. G., No. 3201.)
Residual chert, Richland Creek, Callaway Co., Missouri.
15-16. Pedicle and brachial views of an imperfect internal cast. (W. M., No. 339.)
Residual chert, Springfield, Missouri.

Figs. 17-21. Spirifer striatiformis Meek .... p. 364
17-20. Pedicle, brachial, anterior and lateral views of a nearly perfect specimen. (W. M., No. 13578.)
Waverly Group, Medina, Ohio.
21. View of an imperfect pedicle valve. (W. M., No. 5676.)
Chouteau limestone, Green County, Missouri.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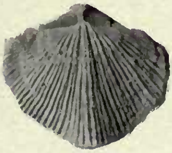
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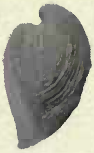
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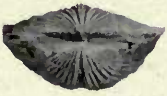
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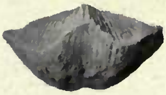
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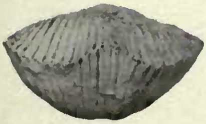
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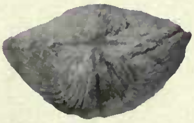
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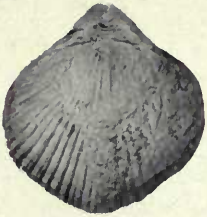
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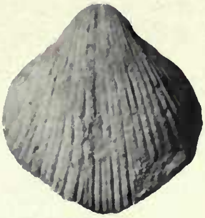
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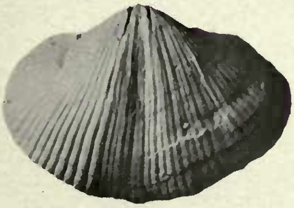
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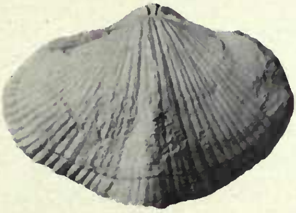
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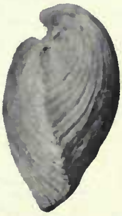
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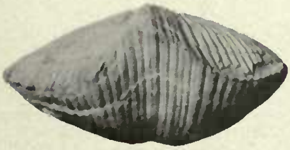
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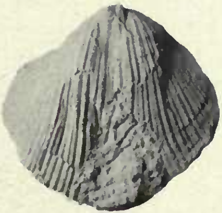
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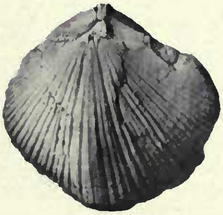
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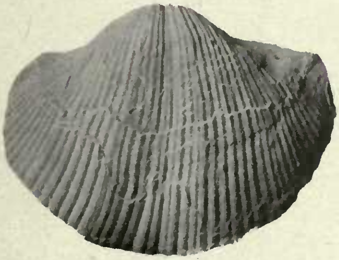
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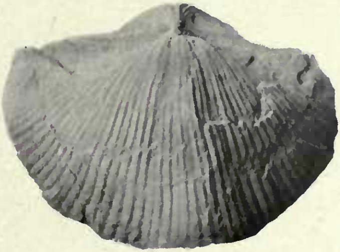
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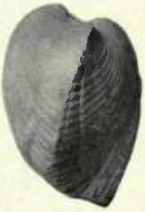
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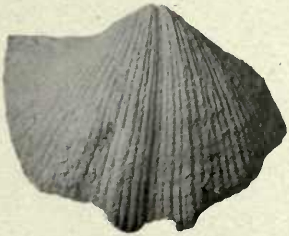
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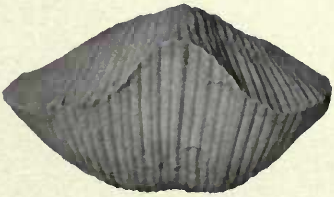
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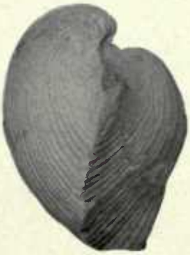
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EXPLANATION OF PLATE XLIX.

Figs. 1-14. Spirifer keokuk Hall....................................p. 350

1-4. Pedicle, brachial, anterior and lateral views of a nearly complete specimen. 5-9. Pedicle, brachial, lateral, posterior and anterior views of another specimen. (W. M., No. 13519.) 10-14. Posterior, lateral, brachial, pedicle and anterior views of a third specimen. (W. M., No. 5626.)

Keokuk limestone, Keokuk, Iowa.

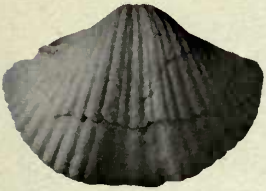
Figs. 15-19. Spirifer floydensis n. sp..................................p. 351

15-16. Brachial and lateral views of one of the cotypes. (W. M., No. 13526.)

Knobstone formation, Indiana.

17-19. Brachial, anterior and lateral views of another cotype. (W. M., No. 13525.)

Knobstone formation, Floyd County, Indiana.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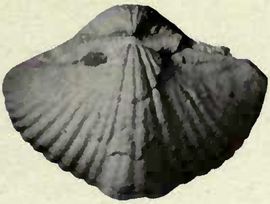
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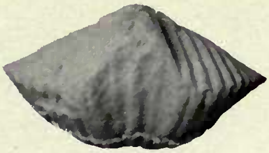
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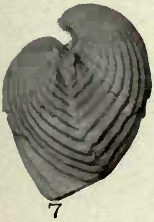
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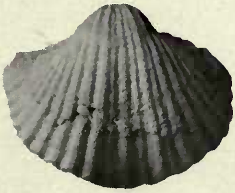
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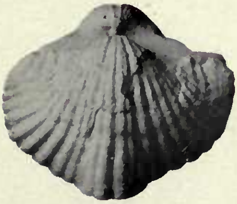
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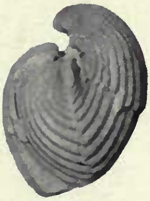
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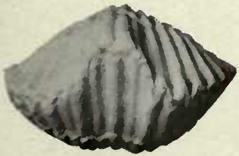
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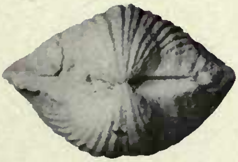
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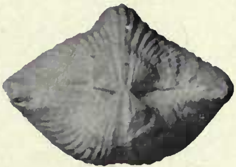
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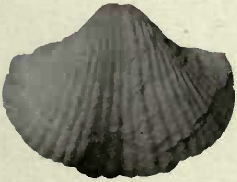
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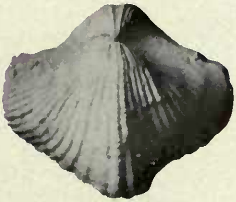
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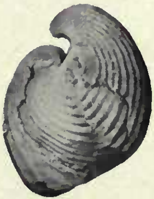
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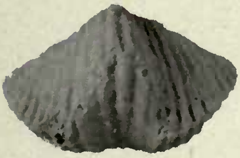
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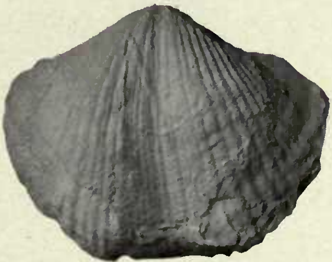
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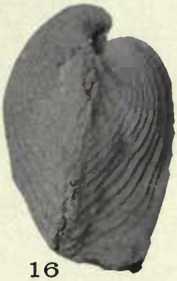
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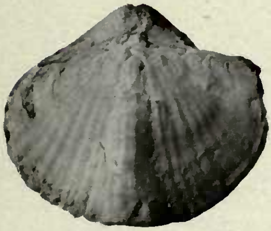
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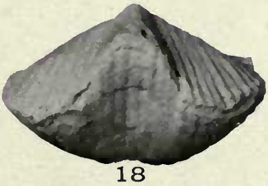
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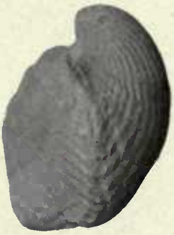
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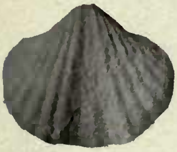
EXPLANATION OF PLATE L.

Figs. 1-5. Spirifer littoni Swallow..................................p. 348
Pedicle, brachial, lateral, posterior and anterior views of a very perfect specimen. (W. M., No. 14775.)
St. Louis limestone, Alton, Illinois.

Figs. 6-12. Spirifer indianensis n. sp..................................p. 352
6-10. Pedicle, brachial, lateral, posterior and anterior views of a partially restored specimen. 11-12. Views of two pedicle valves. Cotypes. (W. M., No. 7493.)
Harrodsburg limestone, Spergen Hill, Indiana.

Figs. 13-14. Spirifer marshallensis n. sp..............................p. 349
Views of two brachial valves. Cotypes. (W. M., No. 13541.)
Kinderhook, LeGrand, Iowa.

Figs. 15-22. Spirifer subrotundus n. nom..............................p. 356
15-18. Pedicle, brachial, lateral and anterior views of a nearly complete specimen. (W. M., No. 8618.) 19-22. Pedicle, brachial, lateral and anterior views of another specimen. (W. M., No. 5932.)
Chonopectus sandstone, Burlington, Iowa.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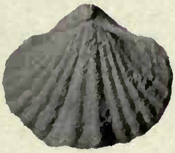
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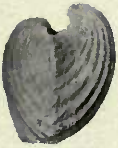
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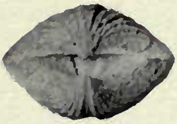
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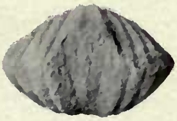
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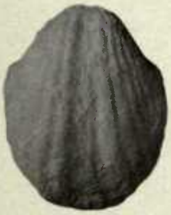
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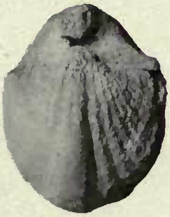
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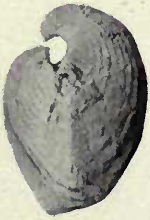
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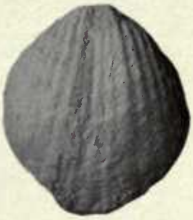
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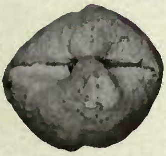
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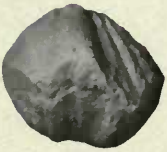
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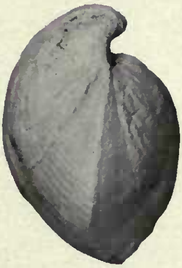
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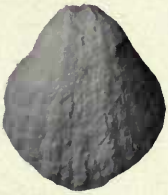
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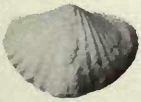
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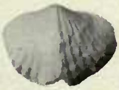
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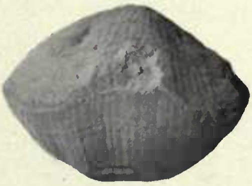
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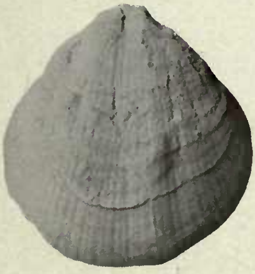
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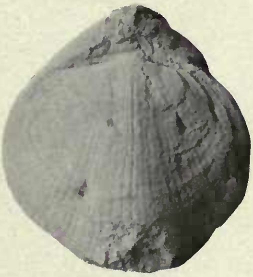
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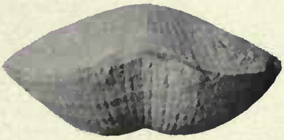
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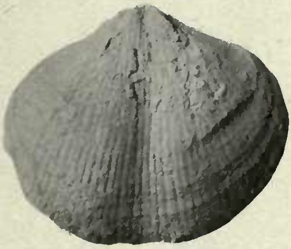
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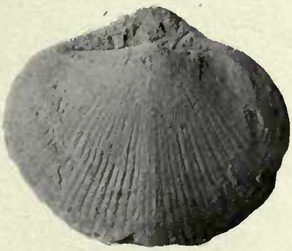
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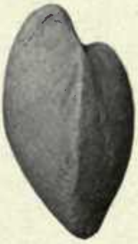
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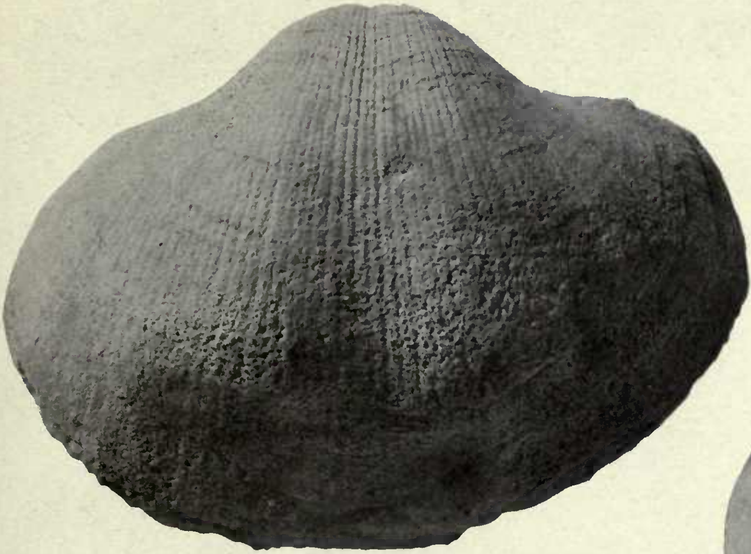
EXPLANATION OF PLATE LI.

Figs. 1-2. Spirifer grimesi Hall....................................p. 361
Pedicle and brachial views of a large and nearly complete specimen. (W. M., No. 12942.)
Burlington limestone, Springfield, Missouri.

Figs. 3-8. Spirifer maplensis n. sp..................................p. 357
3-6. Views of four different pedicle valves. 7-8. Views of two brachial valves. (W. M., No. 10580.)
English River Grit, Kinderhook, Maple Mill, Washington County, Iowa.



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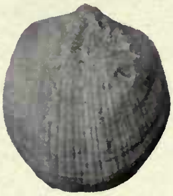

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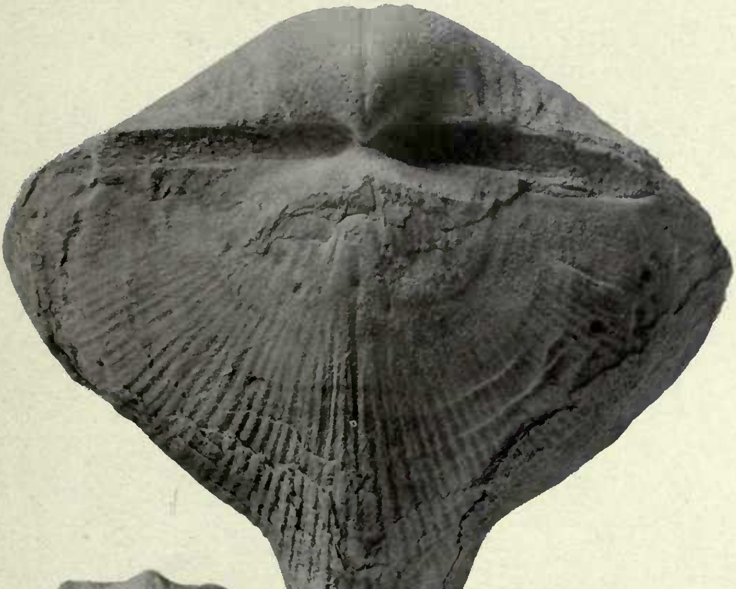

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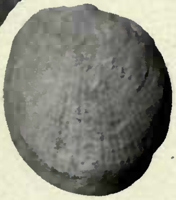

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EXPLANATION OF PLATE LII.

Figs. 1-4. Spirifer grimesi Hall.....................................p. 361

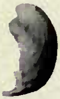
1-3. Anterior, posterior and lateral views of the specimen illustrated on Plate LI, Figs. 1 and 2. (W. M., No. 12942.) 4. View of a pedicle valve in the usual condition of preservation. (W. M., No. 331.)

Burlington limestone, Springfield, Missouri.

Figs. 5-11. Brachythyris fernglenensis Weller....................p. 372

5. Lateral view of a pedicle valve. 6. View of another pedicle valve. Cotypes. (W. M., No. 13538.) 7-11. Pedicle, brachial, lateral, anterior and posterior views of a nearly perfect specimen. (D. K. G., No. 3101.)

Fern Glen formation, Fern Glen, Missouri.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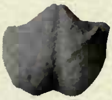
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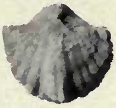
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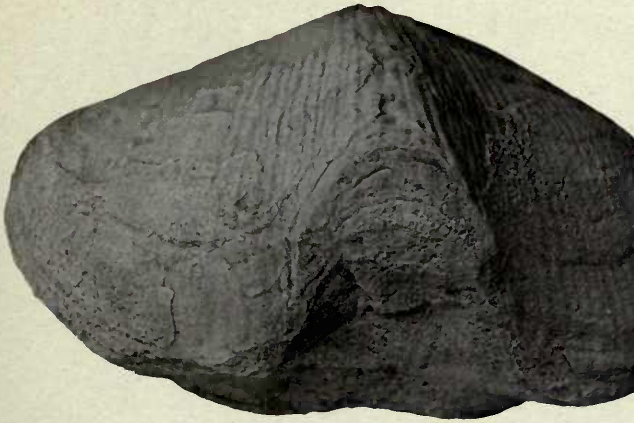
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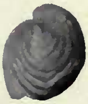
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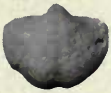
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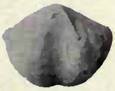
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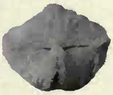
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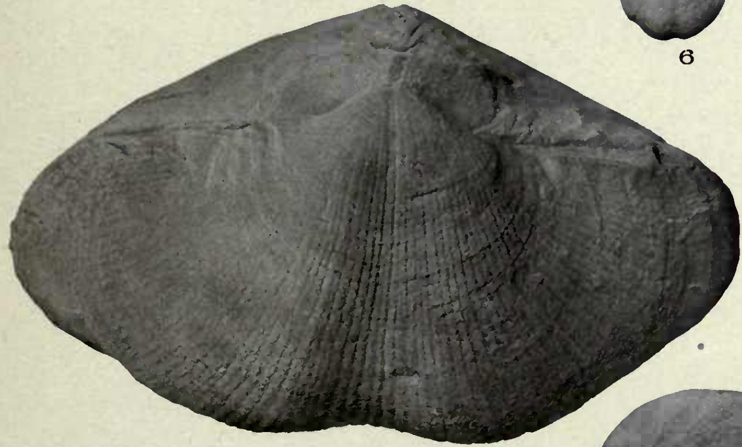
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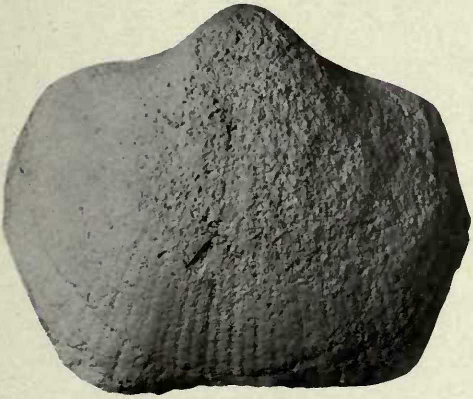
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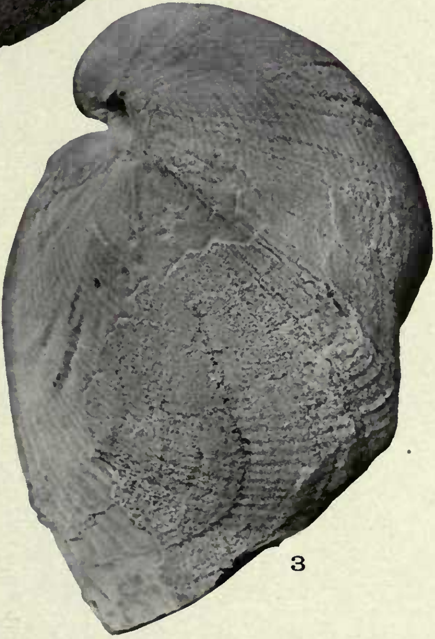
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EXPLANATION OF PLATE LIII.

Figs. 1-2. SPIRIFER GRIMESI Hall....................................p. 361

1. Interior view of a pedicle valve. (W. M., No. 10762.) 2. View of an incomplete pedicle valve with the plications not worn, showing bifurcation. (W. M., No. 14786.)

Burlington limestone, near Springfield, Missouri.

Figs. 3-6. SPIRIFER ROWLEYI n. sp....................................p. 360

3-4. Pedicle and brachial views of a nearly complete specimen. 5. Lateral view of another example. (W. M., No. 14783.)

Lake Valley Beds, Lake Valley, New Mexico.

6. View of a worn pedicle valve. (W. M., No. 13919.)

Fern Glen formation, Fern Glen, Missouri.

Fig. 7. SPIRIFER sp.

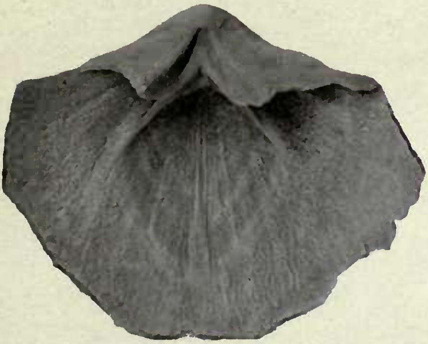
Pedicle view of a nearly complete specimen. (W. M., No. 5653.)

Keokuk limestone, near Springfield, Missouri.

Figs. 8-9. BRACHYTHYRIS BURLINGTONENSIS n. sp......................p. 371

8. View of a plaster cast from a natural mould, partially restored. 9. View of the natural internal cast of the same specimen. Cotypes. (W. M., No. 13543.)

Kinderhook, Bed No. 5, Burlington, Iowa.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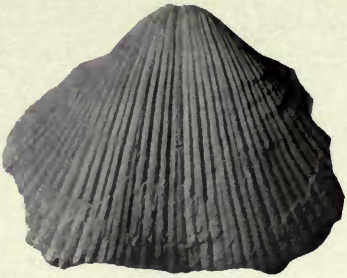
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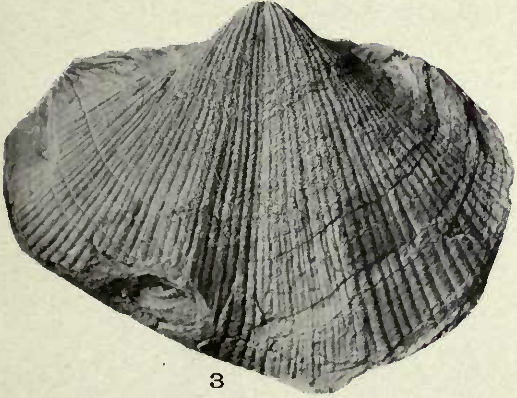
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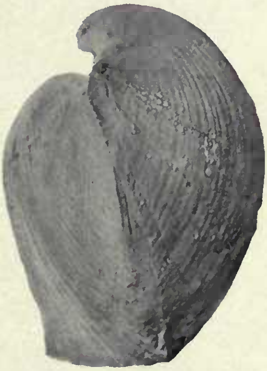
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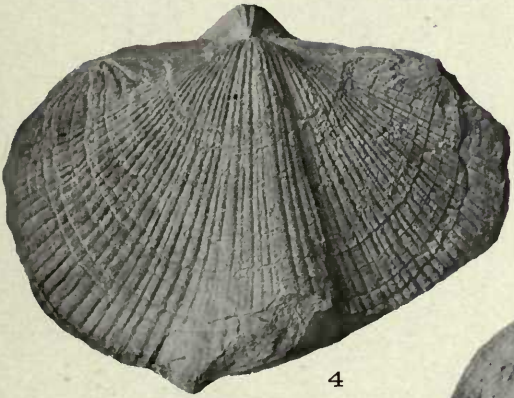
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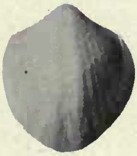
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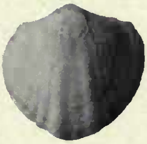
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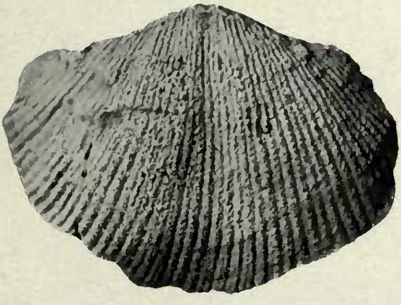
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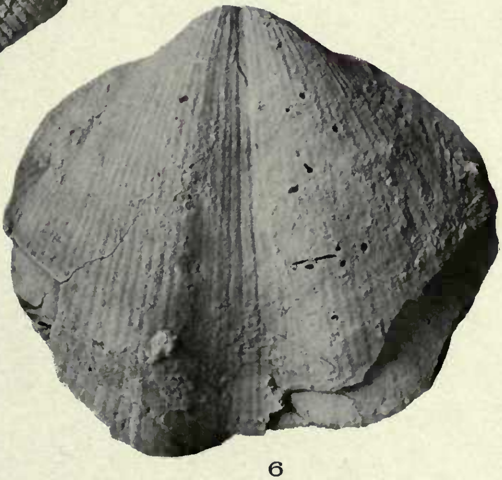
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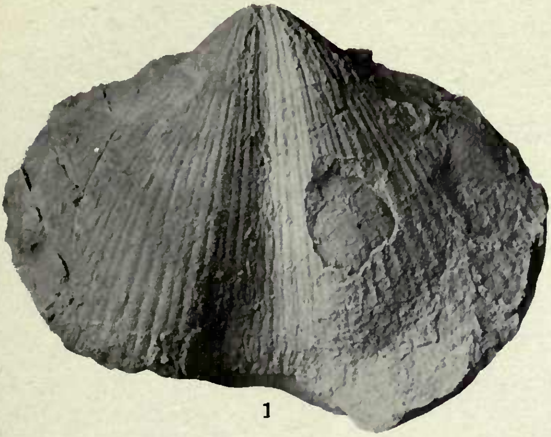
EXPLANATION OF PLATE LIV.

Figs. 1-4. SPIRIFER ROWLEYI n. sp. .... p. 360
Pedicle, brachial, posterior and lateral views of the holotype. (W. M., No. 13537.)
Fern Glen formation, Fern Glen, Missouri.

Figs. 5-10. SPIRIFER CALVINI n. sp. .... p. 368
5. View of a pedicle valve. Cotype. (W. M., No. 13542.)
Kinderhook, Tama County, Iowa.
6-9. Pedicle, anterior, posterior and lateral views of a nearly perfect specimen. 10. View of a brachial valve. Cotypes. (W. M., No. 13540.)
Kinderhook, Le Grand, Iowa.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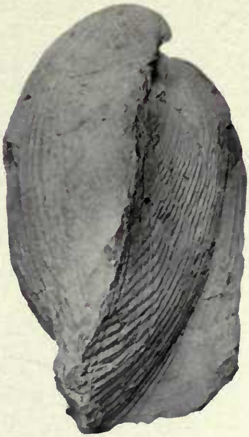
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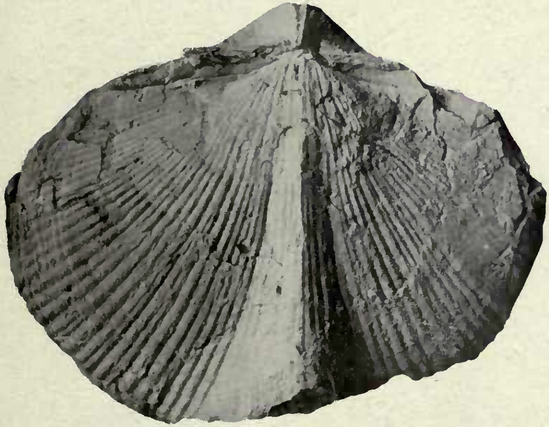
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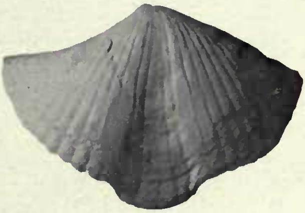
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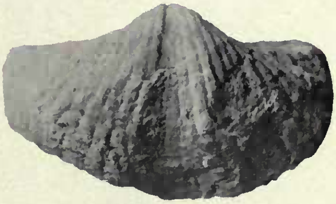
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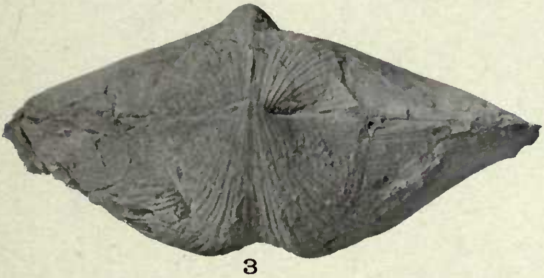
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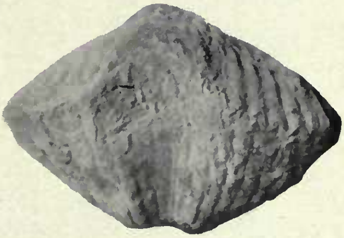
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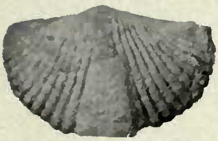
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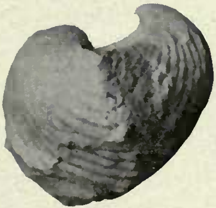
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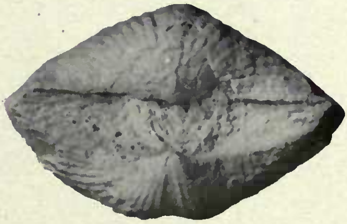
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EXPLANATION OF PLATE LV.

Figs. 1-8. Spirifer gregeri n. sp. . . . . .p. 359

1-2. Views of two pedicle valves with the shell partially removed.

3. Posterior view of another specimen. Cotypes. (W. M., No. 13552.)

Summit of Chouteau limestone, Sedalia, Missouri.

4. View of a pedicle valve retaining the shell. Cotype. (W. M., No. 13578.)

Upper Chouteau, Head of Middle River, Callaway Co., Missouri.

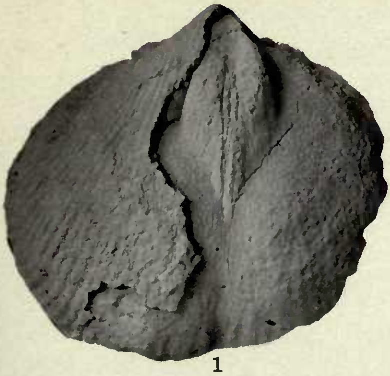
5-8. Pedicle, brachial, lateral and anterior views of a nearly complete small specimen. (D. K. G., No. 3401.)

Chouteau limestone, Newark, Knox County, Missouri.

Fig. 9. Spirifer montgomeryensis n. sp. . . . . .p. 367

View of a pedicle valve, the holotype. (W. M., No. 13330.)

Keokuk, Crawfordsville, Indiana.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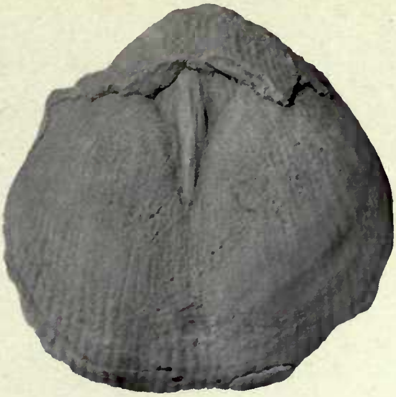
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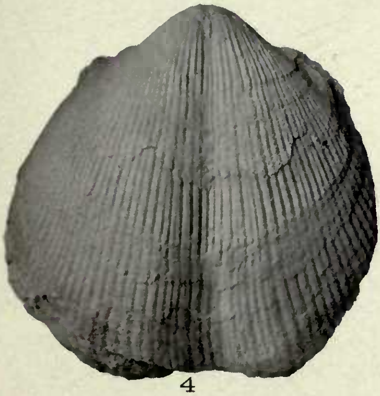
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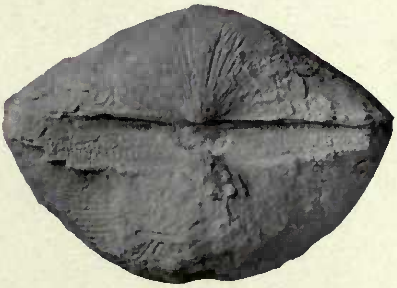
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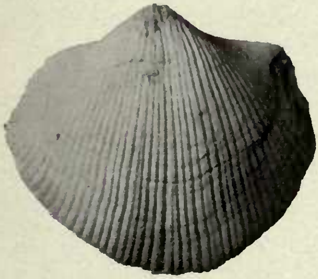
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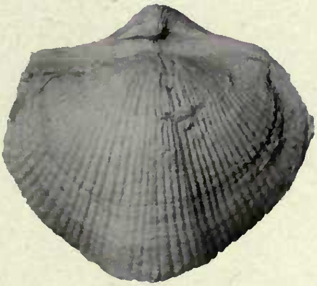
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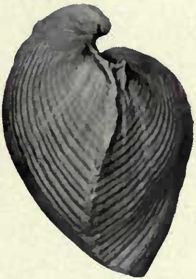
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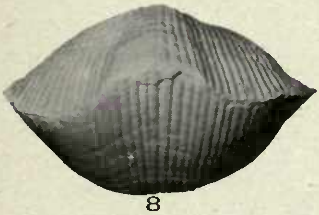
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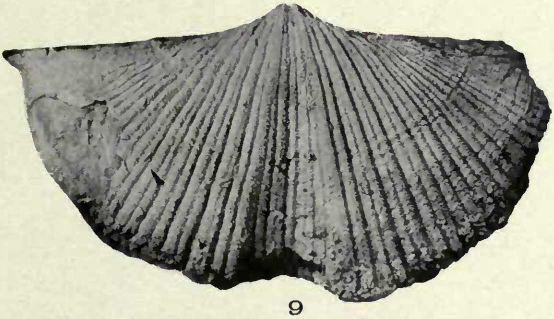
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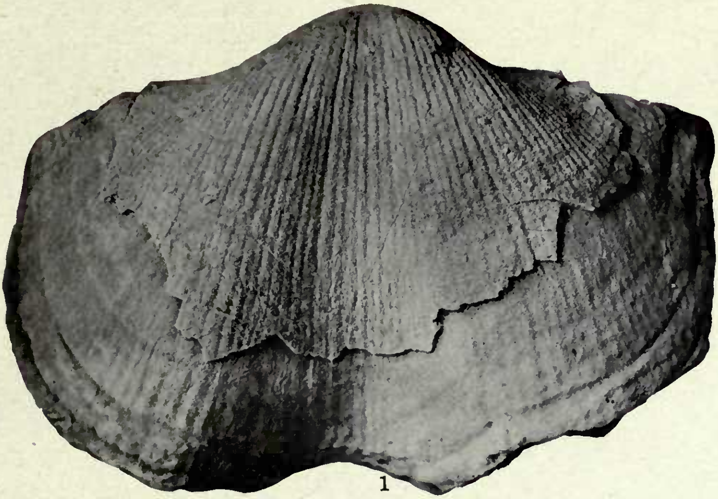
EXPLANATION OF PLATE LVI.

Figs. 1-3. SPIRIFER LOGANI Hall..p. 363
Pedicle, brachial and anterior views of a nearly complete specimen. (W. M., No. 6579.)
Keokuk limestone, Keokuk, Iowa.



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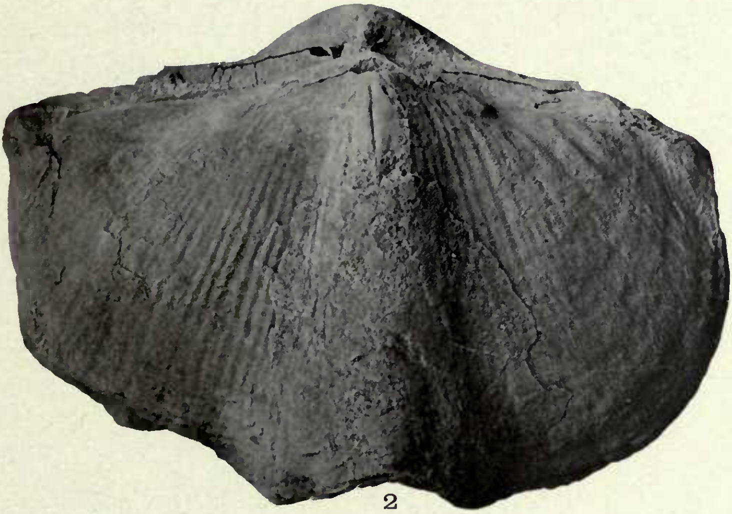

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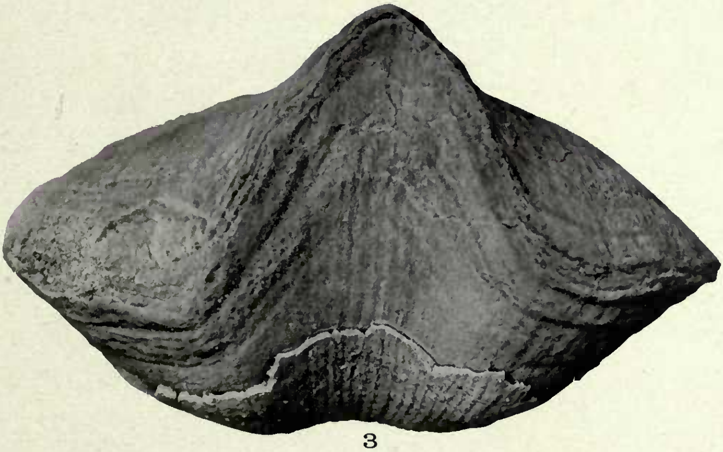

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EXPLANATION OF PLATE LVII.

Figs. 1-3. Spirifer logani Hall..................................p. 363

1-2. Posterior and lateral views of the specimen illustrated on Plate LVI. 3. View of the interior of the pedicle valve of the same specimen. (W. M., No. 6579.)

Keokuk limestone, Keokuk, Iowa.

Figs. 4-11. Brachythyris chouteauensis Weller....................p. 373

4-7. Pedicle, brachial, posterior and lateral views of a nearly complete specimen. (W. M., No. 8544.)

Pierson limestone, near Springfield, Missouri.

8-10. Lateral, pedicle and brachial views of a nearly complete specimen. Holotype. (W. M., No. 9664.)

Chouteau limestone, Chouteau Springs, Missouri.

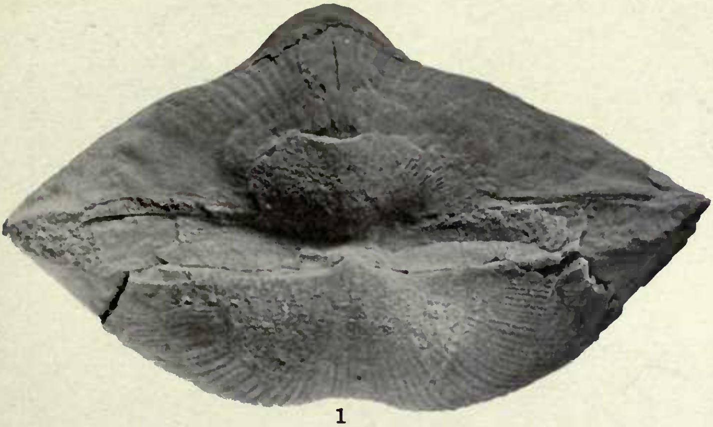
11. Brachial view of a somewhat crushed specimen. (W. M., No. 13536.)

Fern Glen formation, Fern Glen, Missouri.

Fig. 12. Brachythyris peculiaris (Shumard).......................p. 381

View of a broad pedicle valve. (W. M., No. 9722.)

Chouteau limestone, Pettis County, Missouri.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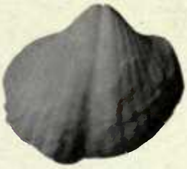
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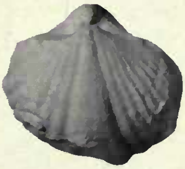
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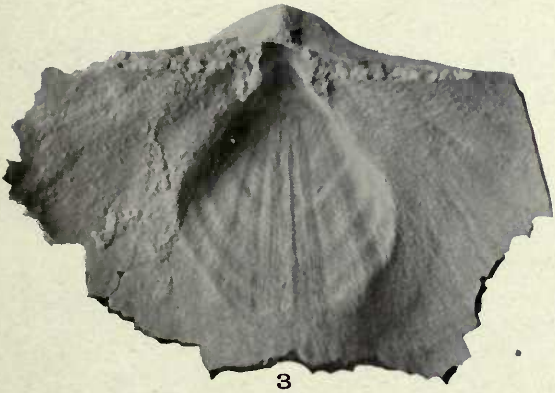
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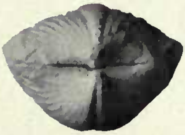
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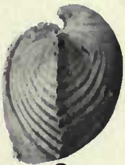
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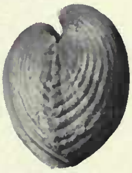
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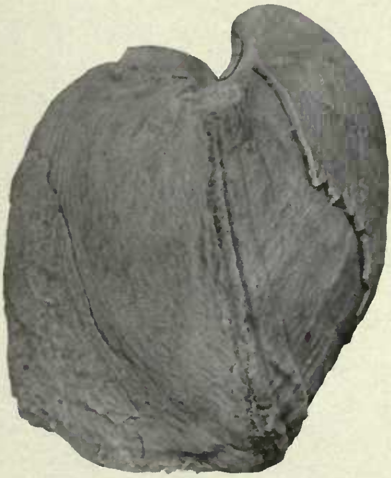
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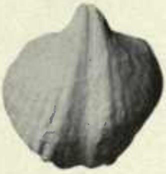
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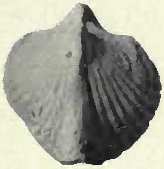
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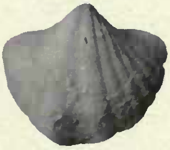
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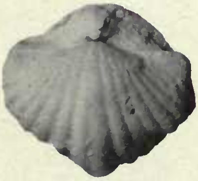
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EXPLANATION OF PLATE LVIII.

Figs. 1-3. Spirifer mortonanus Miller . . . . p. 366

1-2. Views of two pedicle valves. (W. M., No. 13328.) 3. Posterior view of a nearly complete specimen. (W. M., No. 13521.)

Crawfordsville Beds, Crawfordsville, Indiana.

Figs. 4-8. Brachythyris gurleyi n. sp . . . . p. 377

Pedicle, brachial, anterior, posterior and lateral views of the holotype. (W. M., No. 7550.)

Salem limestone, Indiana.

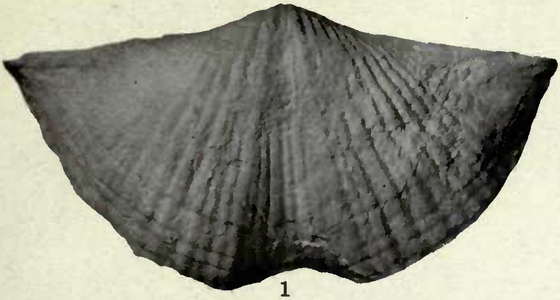
Figs. 9-20. Brachythyris peculiaris (Shumard) . . . . p. 381

9-12. Pedicle, brachial, anterior and lateral views of a very perfect specimen. 13-16. Pedicle, brachial, posterior and lateral views of another specimen. (W. M., No. 9662.)

Chouteau limestone, Chouteau Springs, Missouri.

17-20. Pedicle, brachial, anterior and posterior views of a very narrow specimen. (W. M., No. 7941.)

Chouteau limestone, Pettis County, Missouri.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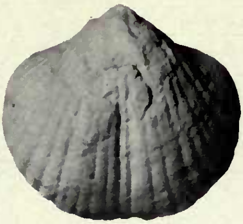
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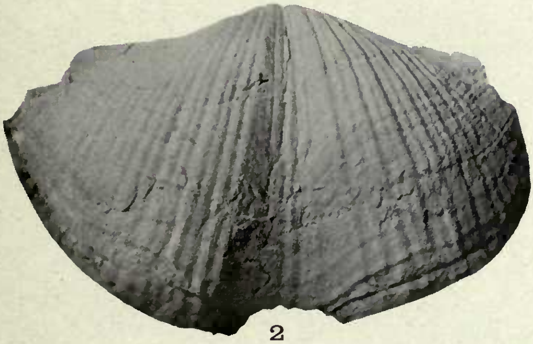
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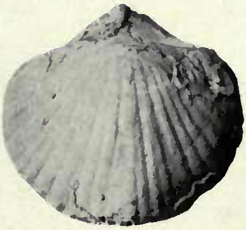
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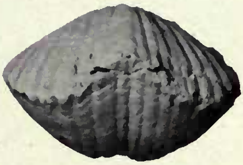
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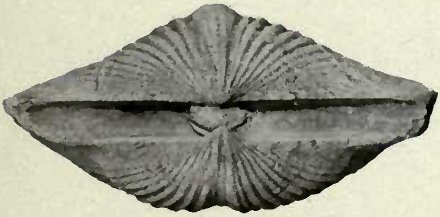
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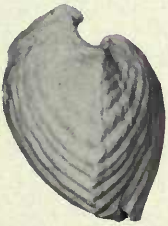
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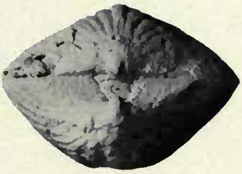
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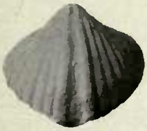
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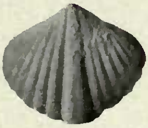
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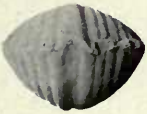
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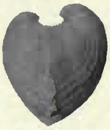
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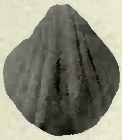
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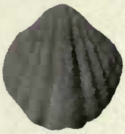
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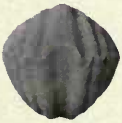
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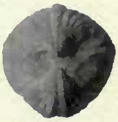
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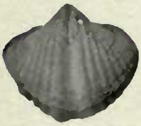
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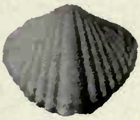
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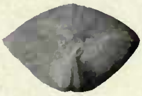
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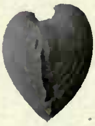
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EXPLANATION OF PLATE LIX.

Figs. 1-6. Spirifer mortonanus Miller............................p. 366

1-3. Pedicle, brachial and lateral views of a nearly perfect specimen. (W. M., No. 13328.) 4-6. Pedicle, posterior and anterior views of a nearly complete specimen. (W. M., No. 13321.)

Crawfordsville beds, Crawfordsville, Indiana.

Figs. 7-14. Brachythyris altonensis n. sp..........................p. 379

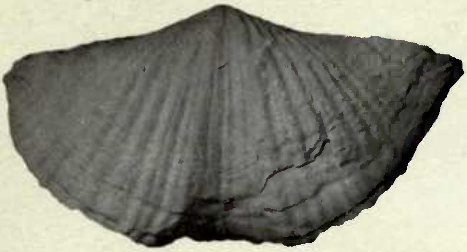
7-10. Pedicle, brachial, anterior and posterior views of a very perfect internal cast. 11-14. Pedicle, brachial, lateral and anterior views of another specimen. Cotypes. (W. M., No. 10925.)

St. Louis limestone, 1 mile above Alton, Illinois.

Figs. 15-19. Brachythyris semiplicata (Hall)......................p. 380

Pedicle, brachial, anterior, lateral and posterior views of a nearly perfect specimen. (W. M., No. 14776.)

Kinderhook, 3½ miles N. W. of Jonesboro, Illinois.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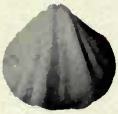
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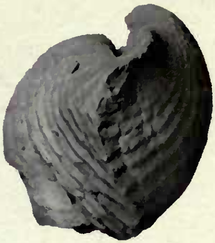
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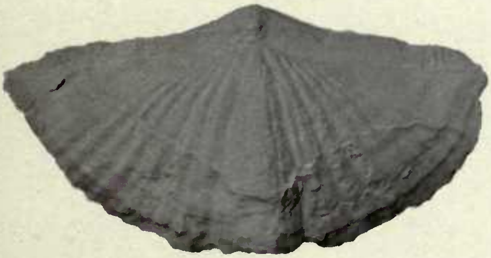
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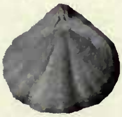
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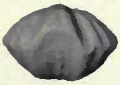
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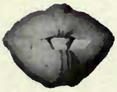
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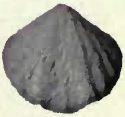
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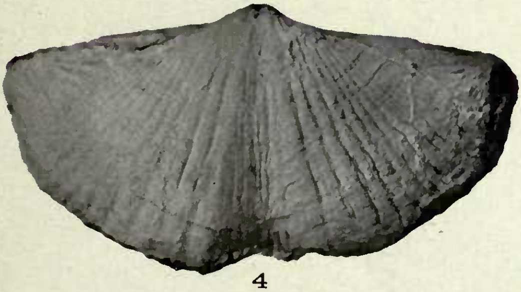
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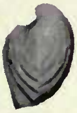
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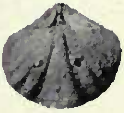
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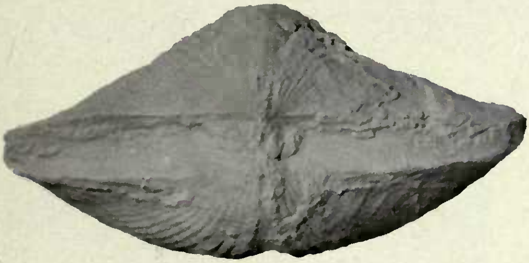
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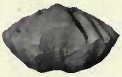
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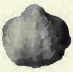
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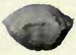
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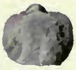
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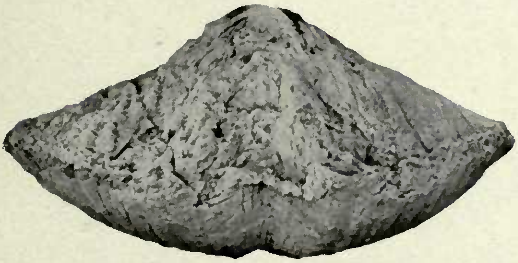
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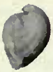
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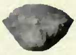
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EXPLANATION OF PLATE LX.

Figs. 1-15. BRACHYTHYRIS SUBCARDIIFORMIS Hall..........................p. 376

1-3. Pedicle, lateral and brachial views of a sulphur cast of the holotype. (W. M., No. 14213.)

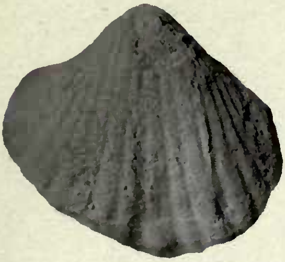
Salem limestone, above Alton, Illinois.

4-6. Pedicle, lateral and brachial views of a large specimen. (W. M., No. 8617.)

Edwardsville, Indiana.

7-11. Pedicle, brachial, posterior, lateral and anterior views of a nearly perfect specimen. (W. M., No. 6352.) 12. Posterior view of a pedicle valve showing the raised margins of the true cardinal area. (W. M.) 13-14. Posterior and pedicle views of a large pedicle valve. 15. Anterior view of another specimen. (W. M., No. 7520.)

Salem limestone, Spergen Hill, Indiana.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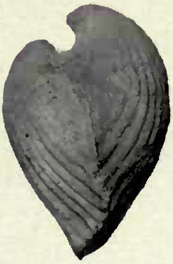
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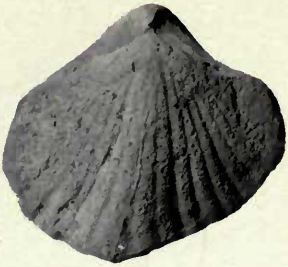
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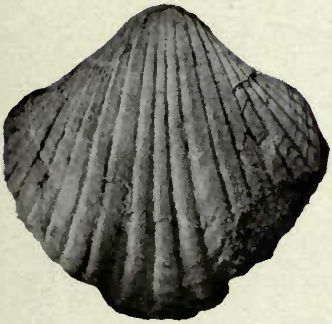
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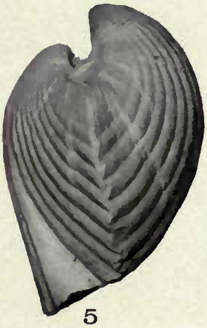
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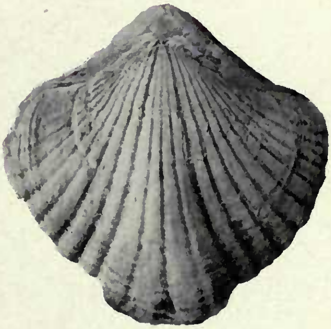
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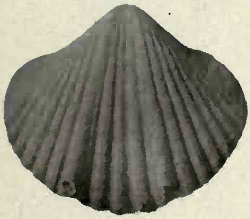
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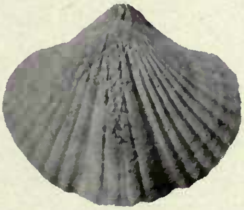
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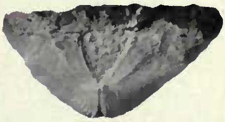
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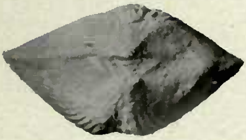
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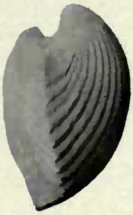
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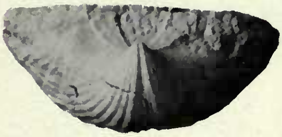
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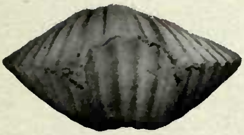
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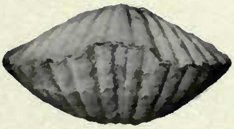
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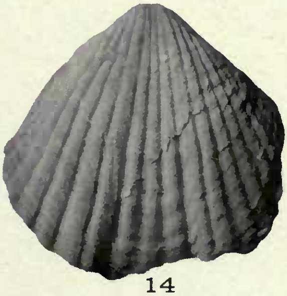
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EXPLANATION OF PLATE LXI.

Figs. 1-8. BRACHYTHYRIS SUBORBICULARIS Hall........................p. 374

1-2. Pedicle and brachial views of a sulphur cast of the holotype. (W. M., No. 14217.)

Keokuk limestone, Keokuk, Iowa.

3. View of a large pedicle valve. (W. M., No. 13409.) 4. Pedicle view of another specimen. (W. M., No. 8627.)

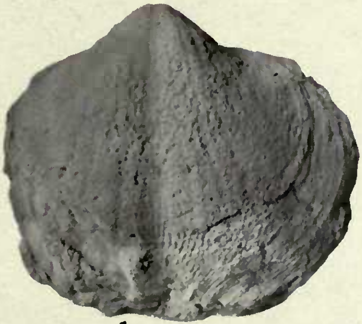
Keokuk limestone, Keokuk, Iowa.

5. View of a brachial valve. (W. M., No. 385.) 6. View of another pedicle valve. (W. M., No. 5655.)

Burlington limestone, Springfield, Missouri.

7. View of an incomplete brachial valve. 8. View of an incomplete pedicle valve. (W. M., No. 13324.)

Crawfordsville beds, Crawfordsville, Indiana.



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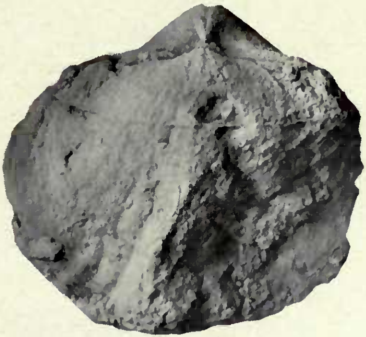

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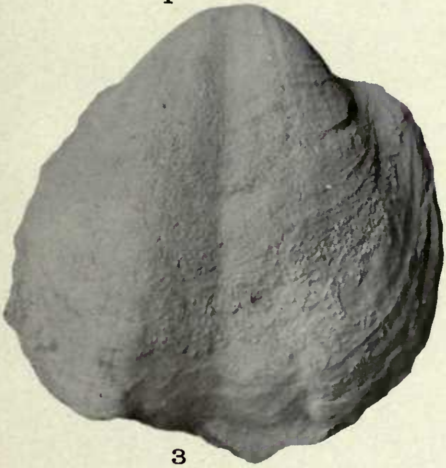

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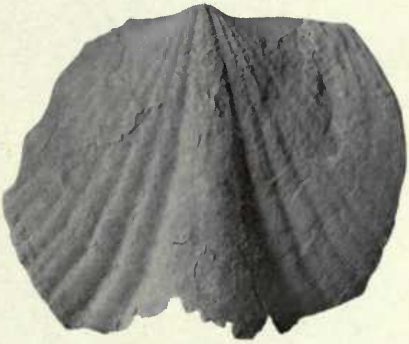

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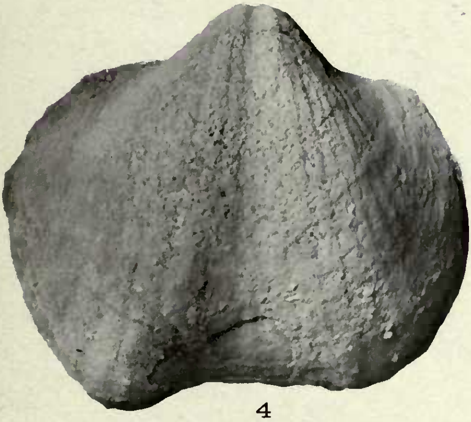

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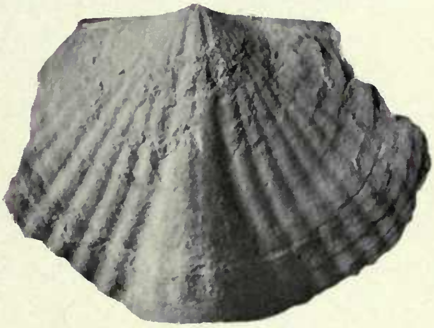

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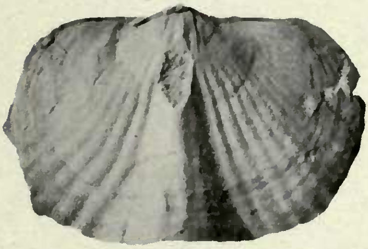

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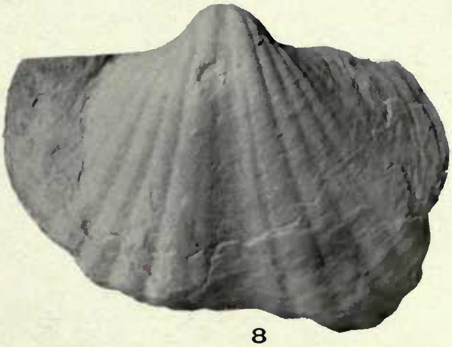

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EXPLANATION OF PLATE LXII.

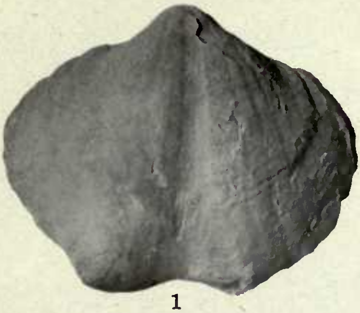
Figs. 1-12. Brachythyris suborbicularis (Hall) .... p. 374

1-5. Pedicle, brachial, posterior, anterior and lateral views of a nearly complete example. (W. M., No. 4721.)
Burlington limestone, near Sulphur Springs, Missouri.

6-10. Pedicle, brachial, lateral, posterior and anterior views of a nearly perfect internal cast. (W. M., No. 5652.)
Residual chert, Springfield, Missouri.

11. View of a pedicle valve. (W. M., No. 13324.)
Crawfordsville beds, Crawfordsville, Indiana.

12. View of a small pedicle valve. (W. M., No. 13325.)
Crawfordsville beds, Offield Creek, near Crawfordsville, Indiana.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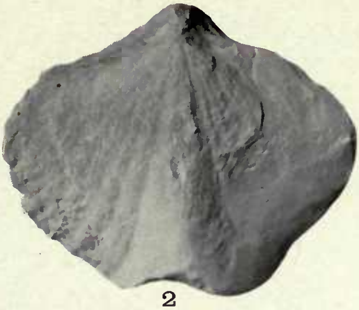
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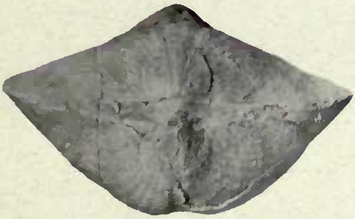
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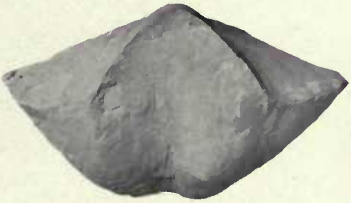
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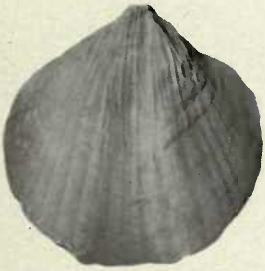
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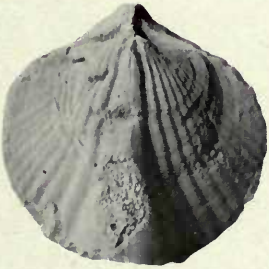
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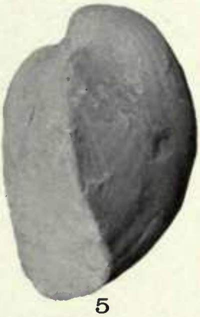
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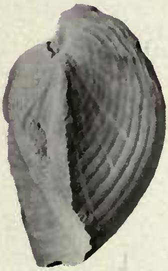
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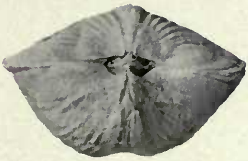
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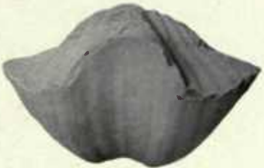
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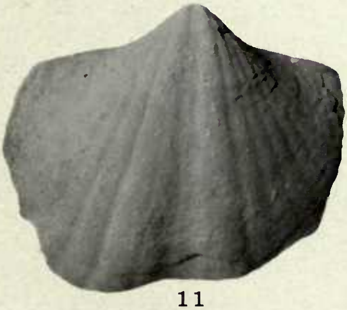
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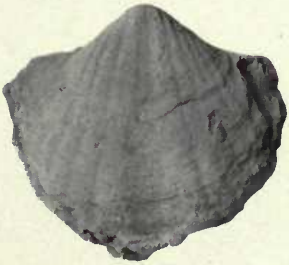
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EXPLANATION OF PLATE LXIII.

Figs. 1-4. CYRTIA INEXPECTANS n. sp. . . . . .p. 383

1. Posterior view showing the cardinal area with covered delthyris. A wax impression from the natural mould of the holotype. 2-4. Posterior, pedicle and lateral views of an imperfect internal cast of a pedicle valve, the holotype. (W. M., No. 381.)

Residual chert, Springfield, Missouri.

Figs. 5-8. SPIRIFERELLA PLENA (Hall) . . . . .p. 412

5-7. Pedicle, brachial and posterior views of a nearly perfect specimen. (W. M., No. 7053.)

Burlington limestone, Quincy, Illinois.

8. View of the interior of a pedicle valve showing the strongly developed dental lamellae. (W. M., No. 7548.)

Burlington limestone, Burlington, Iowa.

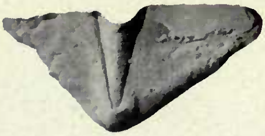
Figs. 9-10. SPIRIFERELLA LATIOR n. sp. . . . . .p. 414

9. View of a nearly complete pedicle valve, the holotype. (W. M., No. 13566.)

Burlington limestone, Springfield, Missouri.

10. View of the interior of an incomplete pedicle valve. (W. M., No. 13570.)

Burlington limestone, Osceola, Missouri.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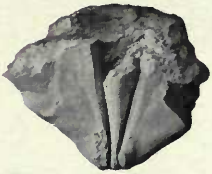
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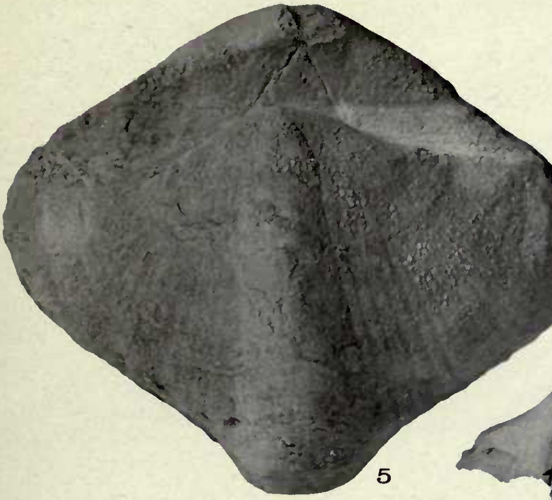
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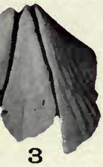
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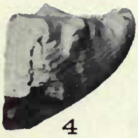
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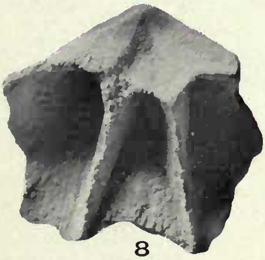
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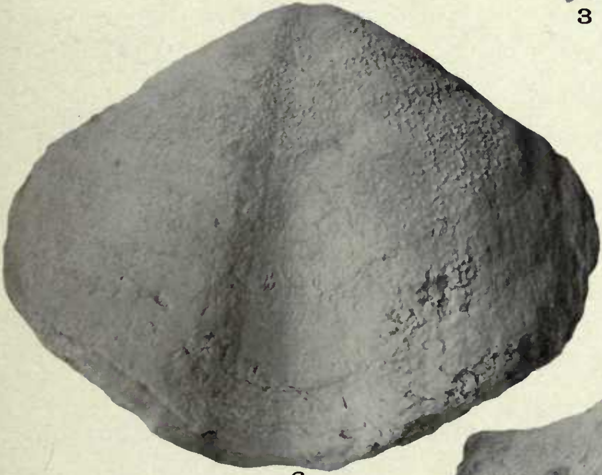
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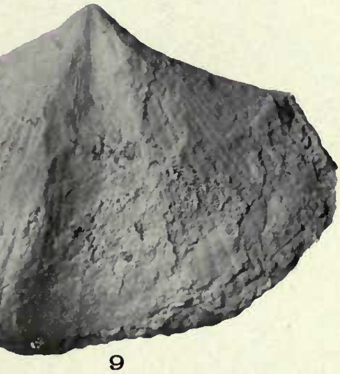
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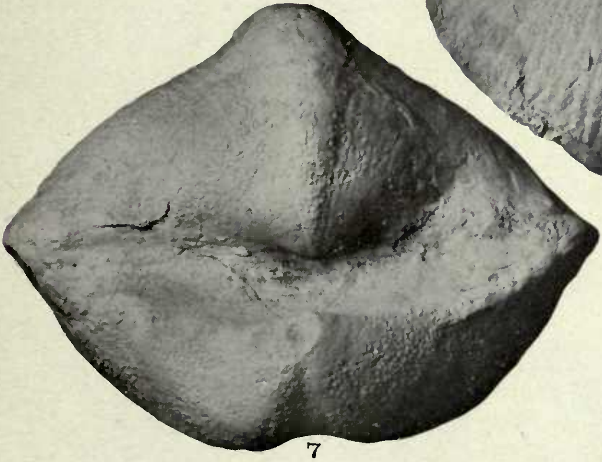
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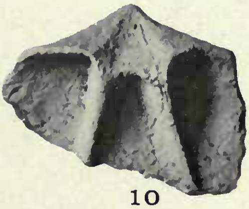
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EXPLANATION OF PLATE LXIV.

Figs. 1-4. Spiriferella plena (Hall) ....p. 412

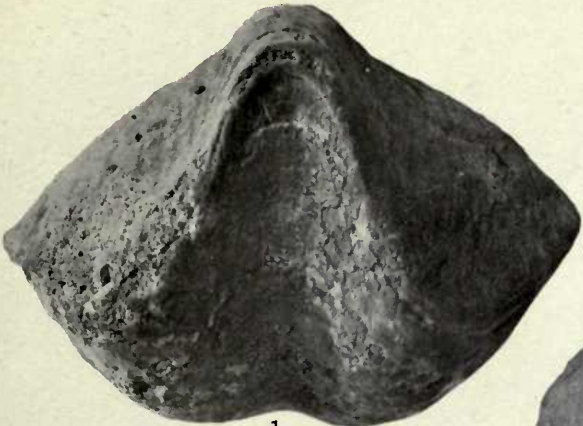
1-2. Anterior and lateral views of the nearly perfect specimen shown on Plate LXIII, Figs. 5-7. (W. M., No. 7053.)
Burlington limestone, Quincy, Illinois.

3-4. Posterior and pedicle views of a nearly complete internal cast. (W. M., No. 13554.)
Residual chert, Sedalia, Missouri.

Figs. 5-9. Spiriferella neglecta (Hall) ....p. 415

5-8. Pedicle, lateral, brachial and anterior views of a small but nearly complete specimen. (W. M., No. 8616.)
Keokuk limestone, Edwardsville, Indiana.

9. View of a nearly perfect internal cast of a pedicle valve, showing the elongate dental lamellae. (W. M., No. 5650.)
Residual chert, Springfield, Missouri.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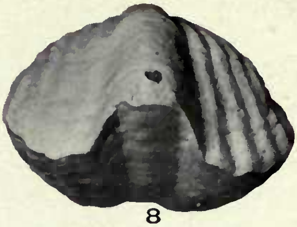
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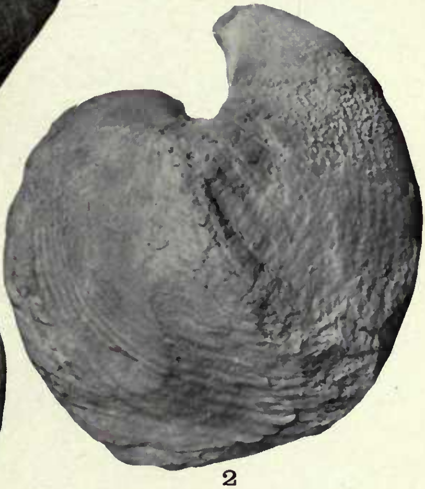
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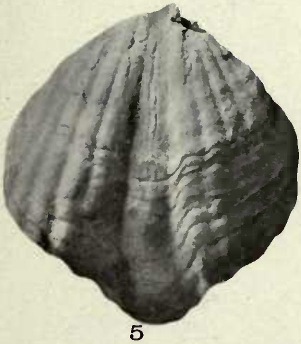
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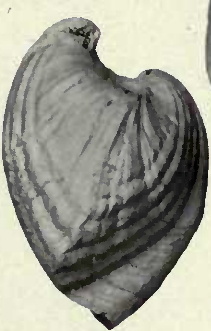
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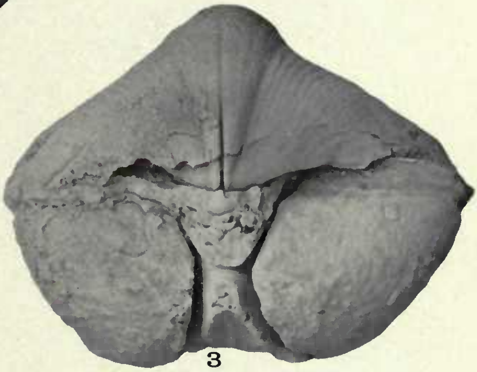
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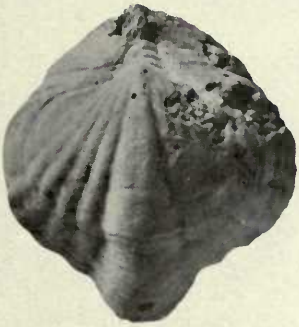
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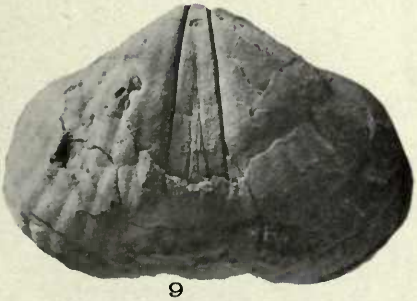
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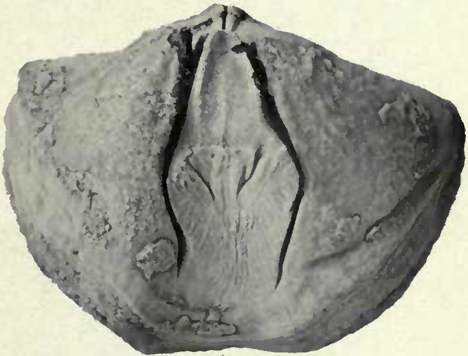
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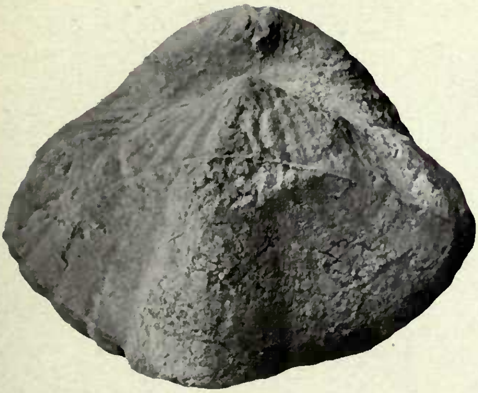
EXPLANATION OF PLATE LXV.

Figs. 1-4. Spiriferella neglecta (Hall) ....p. 415
1-3. Brachial, pedicle and anterior views of a sulphur cast of a nearly perfect specimen. (W. M., No. 14212.) 4. Posterior view of a nearly perfect specimen. (W. M., No. 13323.)
Keokuk limestone, Keokuk, Iowa.

Figs. 5-9. Pseudosyrinx missouriensis n. sp.........................p. 406
Anterior, posterior, lateral, pedicle and brachial views of the holotype, a nearly complete specimen. (W. M., No. 13559.)
Burlington limestone, Osceola, Missouri.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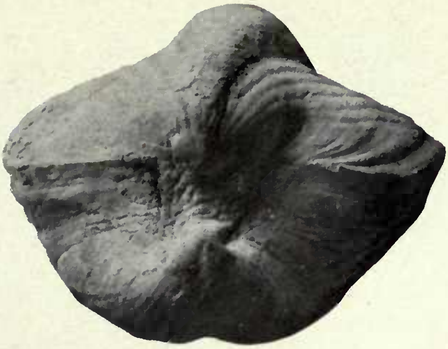
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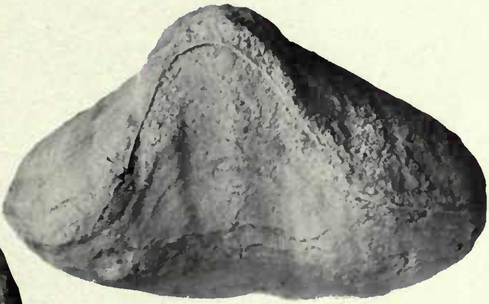
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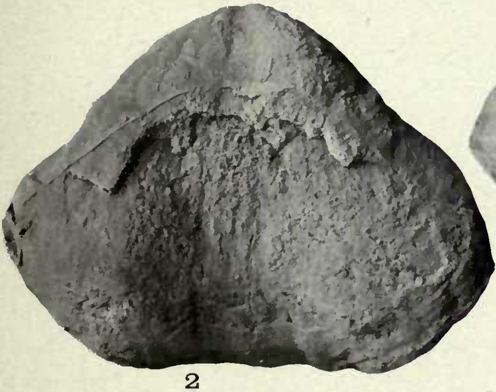
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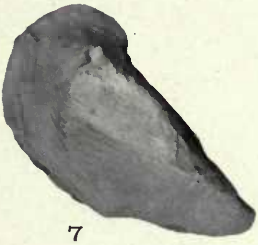
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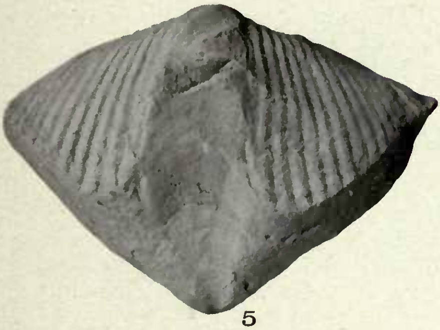
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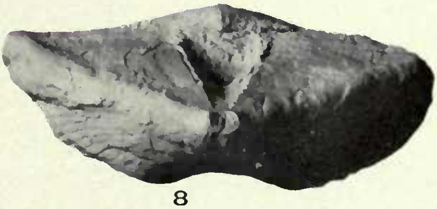
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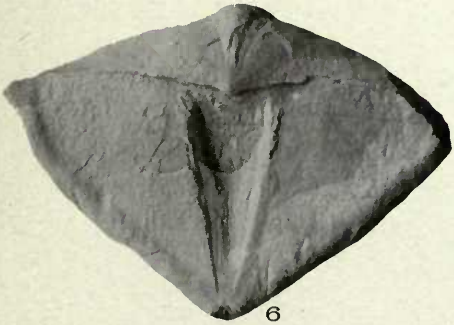
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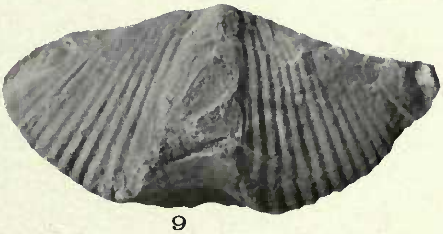
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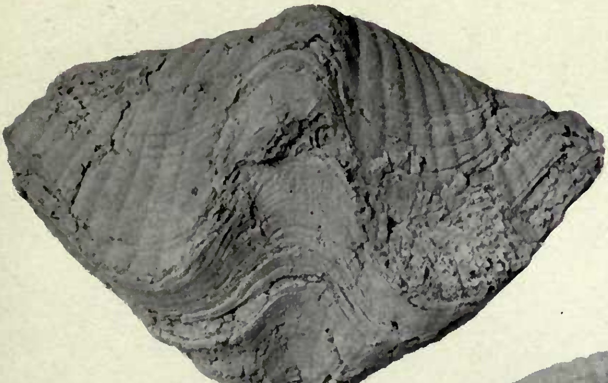
EXPLANATION OF PLATE LXVI.

Figs. 1-5. Pseudosyrinx gigas n. sp....................................p. 410
Anterior, posterior, lateral, pedicle and brachial views of the holotype, a nearly complete specimen. (W. M., No. 12805.)
Keokuk (?), Kentucky.

Figs. 6-10. Pseudosyrinx keokuk n. sp.................................p. 408
Posterior, anterior, brachial, pedicle and lateral views of a nearly complete internal cast. (W. M., No. 5634.)
Residual chert, Springfield, Missouri.

Figs. 11-13. Pseudosyrinx missouriensis n. sp.......................p. 406
11. View of the cardinal area of an incomplete pedicle valve. 12. Lateral view of an incomplete pedicle valve. (W. M., No. 13967.)
Burlington white chert, Louisiana, Missouri.
13. View of the cardinal area of an incomplete pedicle valve. (W. M., No. 13559.)
Burlington limestone, Osceola, Missouri.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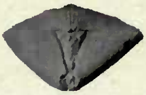
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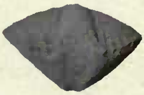
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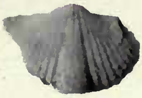
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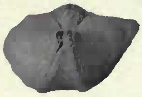
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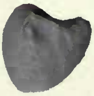
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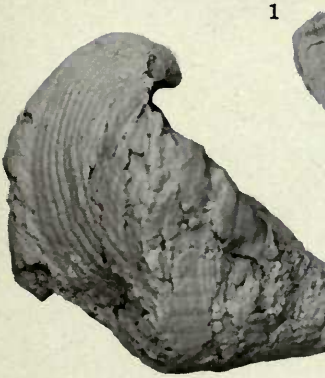
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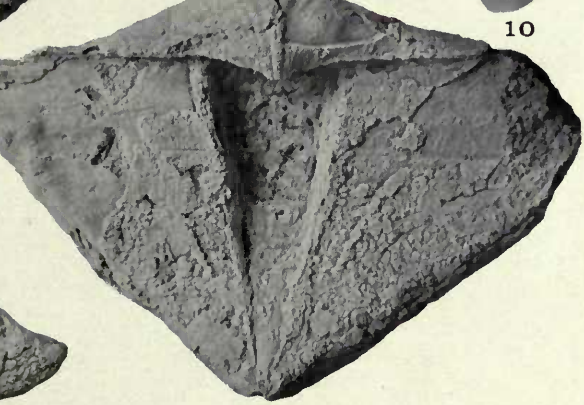
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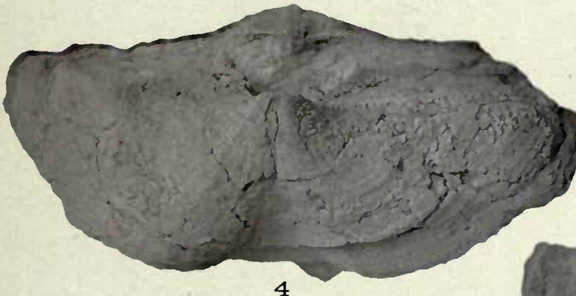
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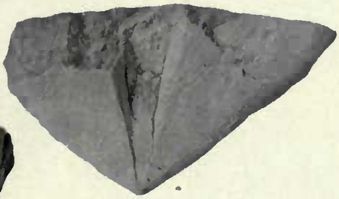
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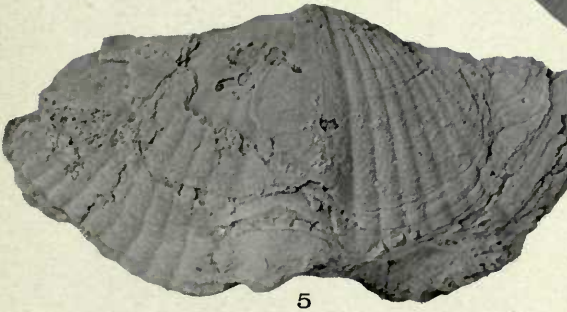
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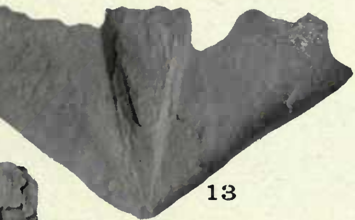
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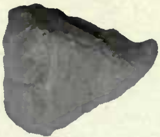
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EXPLANATION OF PLATE LXVII.

Figs. 1-9. Pseudosyrinx keokuk n. sp..............................p. 408

1-5. Posterior, anterior, lateral, pedicle and brachial views of a nearly complete internal cast. Cotype. (W. M., No. 13026.)

Residual chert.

6-9. Posterior, anterior, pedicle and lateral views of a nearly complete specimen. Cotype. (W. M., No. 13020.)

Keokuk limestone, Warsaw, Illinois.

Fig. 10. Pseudosyrinx sp.

View of the cardinal area of an incomplete pedicle valve. (W. M., No. 12807.)

Crawfordsville beds, Crawfordsville, Indiana.

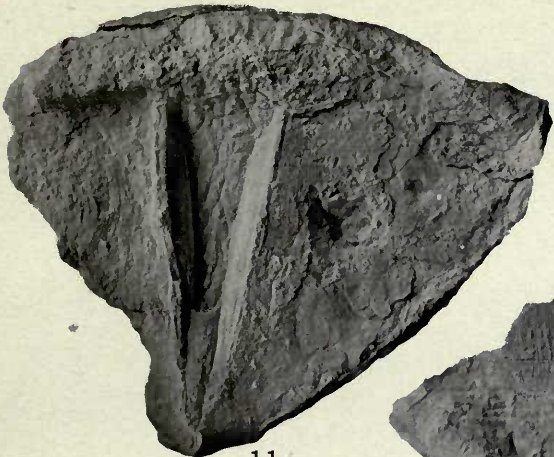
Figs. 11-13. Pseudosyrinx sampsoni Weller.........................p. 405

11. View of the cardinal area of an incomplete specimen apparently belonging to this species. (W. M., No. 12816.)

Keokuk limestone, Warsaw, Illinois.

12-13. Posterior and anterior views of the holotype. (F. A. Sampson.)

Fern Glen formation, Fern Glen, Missouri.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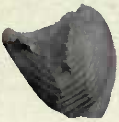
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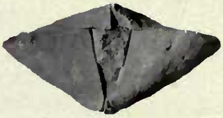
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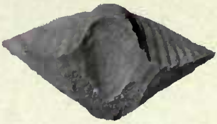
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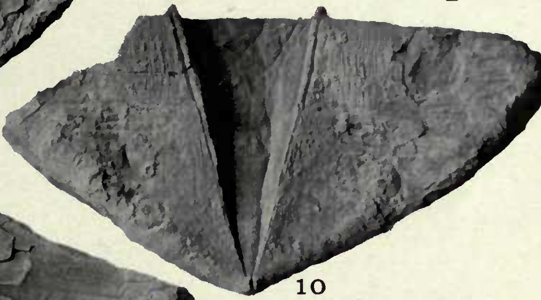
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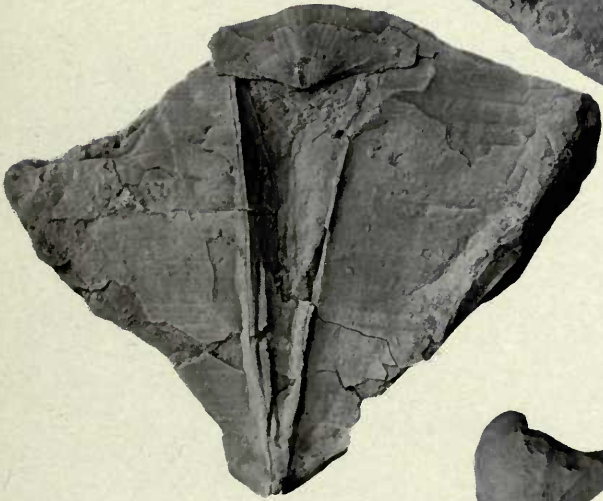
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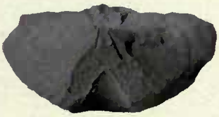
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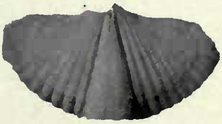
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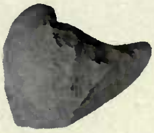
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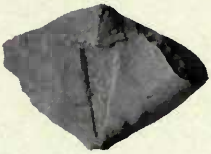
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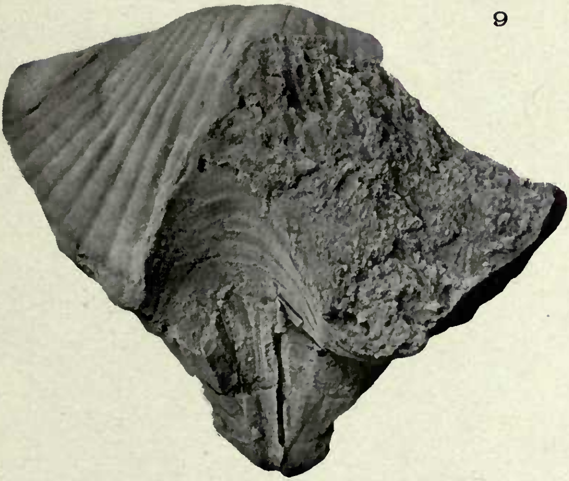
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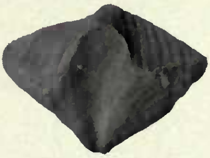
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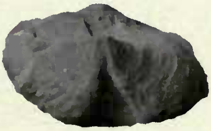
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EXPLANATION OF PLATE LXVIII.

Figs. 1-7. SYRINGOTHYRIS HANNIBALENSIS (Swallow)................p. 388

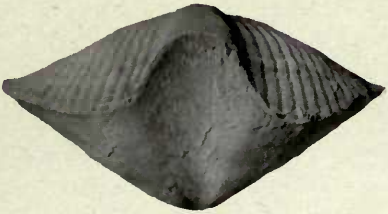
1-5. Posterior, anterior, brachial, pedicle and lateral views of a very perfect exfoliated specimen. (W. M., No. 1086.) 6-7. Interior views of two pedicle valves showing the syrinx. (W. M., No. 13956.)

Louisiana limestone, Louisiana, Missouri.

Figs. 8-15. SYRINGOTHYRIS NEWARKENSIS n. sp......................p. 394

8-11. Posterior, anterior, brachial and lateral views of a somewhat restored specimen. 12-15. Lateral, posterior, anterior and brachial views of another specimen. Cotypes. (D. K. G., No. 3002.)

Chouteau limestone, Newark, Knox County, Missouri.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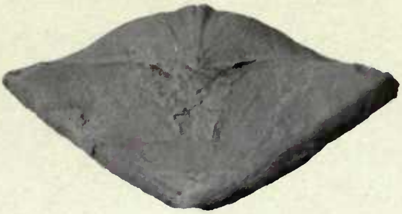
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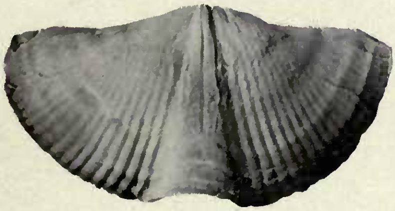
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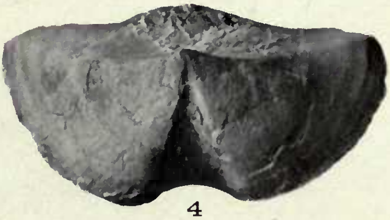
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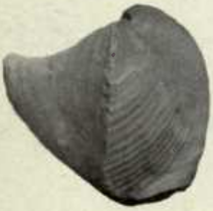
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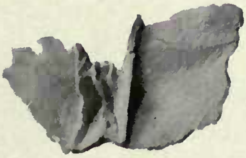
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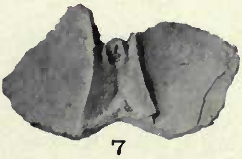
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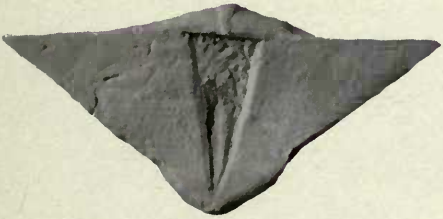
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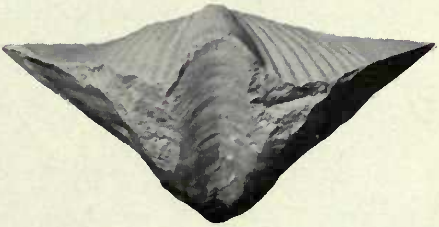
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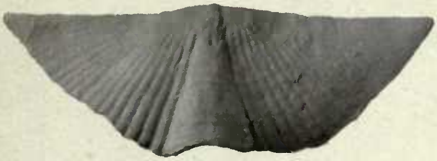
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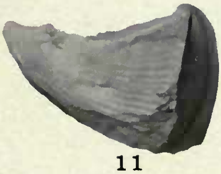
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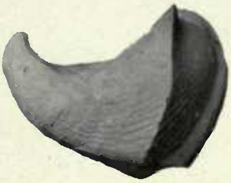
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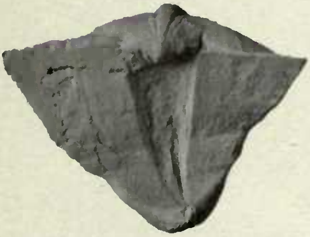
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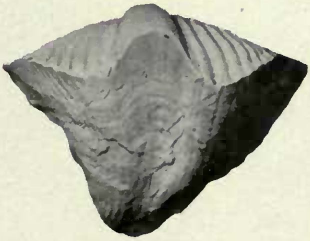
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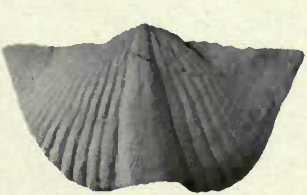
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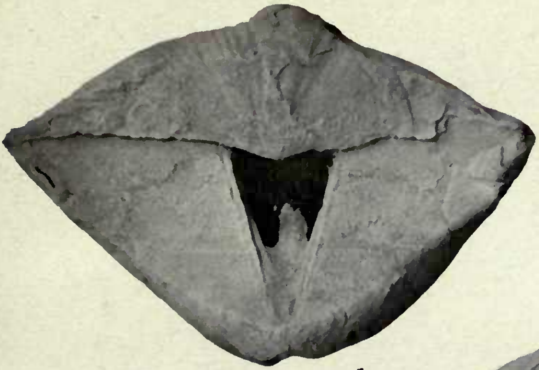
EXPLANATION OF PLATE LXIX.

Figs. 1-5. SYRINGOTHYRIS TYPUS Winchell.........................p. 395
Posterior, lateral, anterior, brachial and pedicle views of a nearly complete specimen. (W. M., No. 8630.)
Burlington limestone, Pike County, Illinois.

Figs. 6-9. SYRINGOTHYRIS TEXTUS (Hall).........................p. 399
6-7. Anterior and brachial views of a rather small example. 8. Posterior view of a larger specimen showing the syrinx. 9. Lateral view of another large specimen. (W. M., No. 13959.)
Knobstone formation, New Albany, Indiana.



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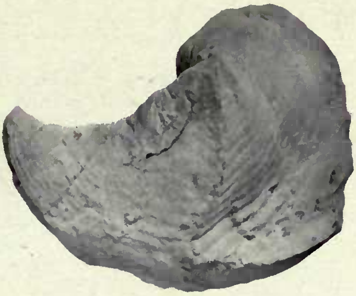

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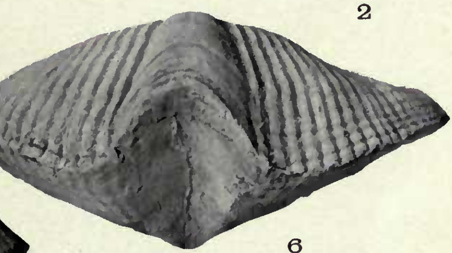

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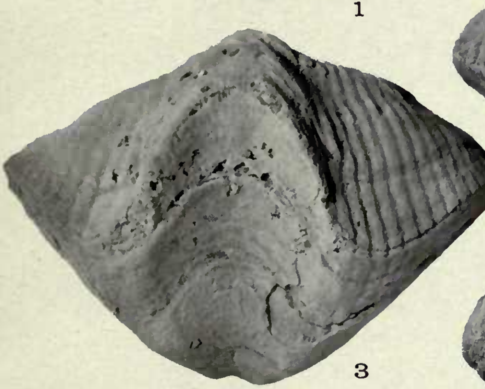

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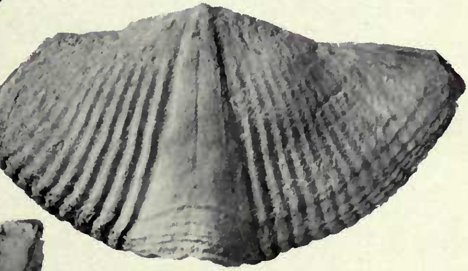

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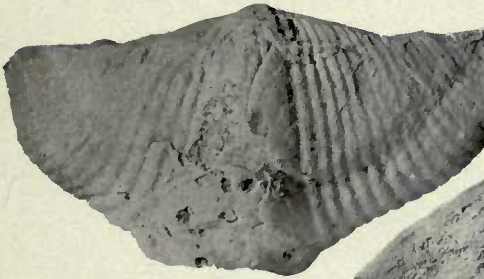

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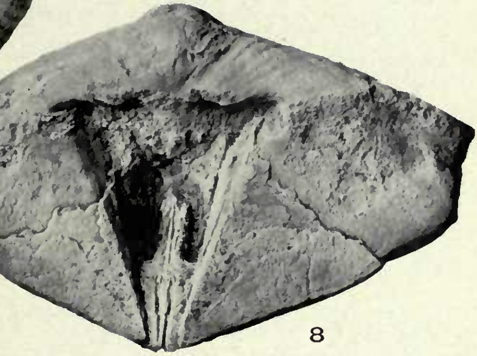

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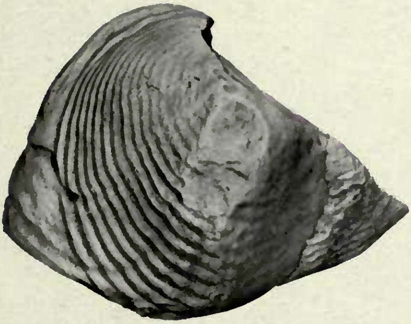

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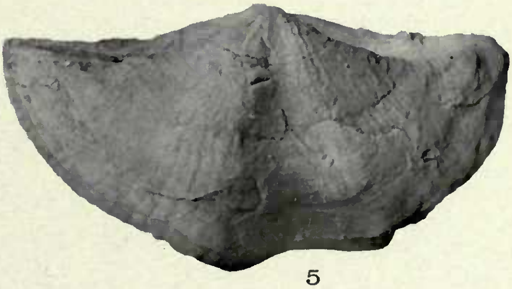

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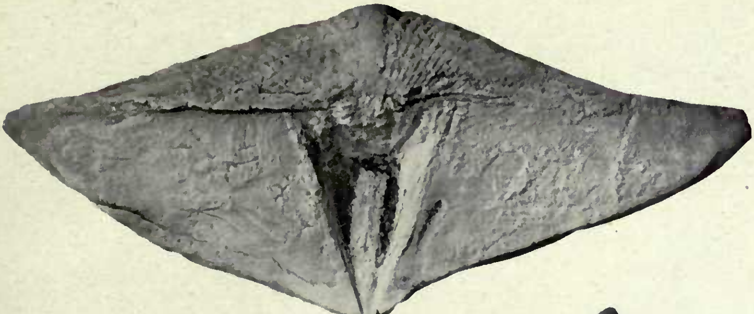
EXPLANATION OF PLATE LXX.

Figs. 1-4. Syringothyris textus (Hall)............................p. 399
Posterior, anterior, brachial and lateral views of a nearly complete specimen. (W. M., No. 3275.)
Knobstone formation, New Providence, Indiana.

Fig. 5. Syringothyris solidirostris n. sp............................p. 403
View of the cardinal area and the interior of a pedicle valve, the holotype. (W. M., No. 12814.)
Keokuk limestone, Keokuk, Iowa.

Figs. 6-15. Syringothyris missouri Hall and Clarke..................p. 393
6-9. Anterior, posterior, brachial and lateral views of the holotype. (W. M., No. 11954.)
Chouteau limestone, Chouteau Springs, Missouri.
10-13. Anterior, posterior, brachial and pedicle views of a nearly complete specimen. 14-15. Posterior and lateral views of another specimen. (W. M., No. 13957.)
Chouteau limestone, Dogtown Creek, Calhoun Co., Illinois.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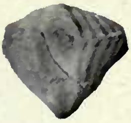
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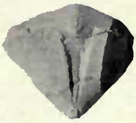
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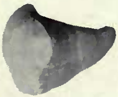
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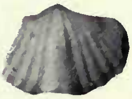
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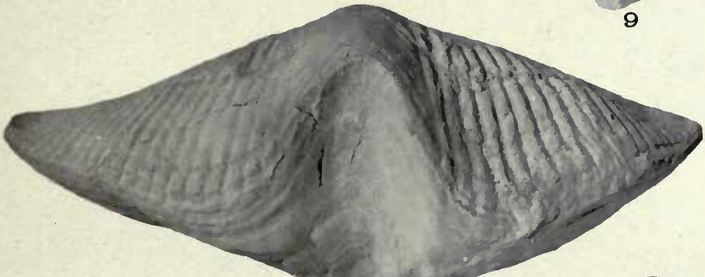
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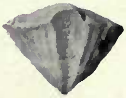
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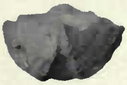
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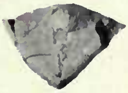
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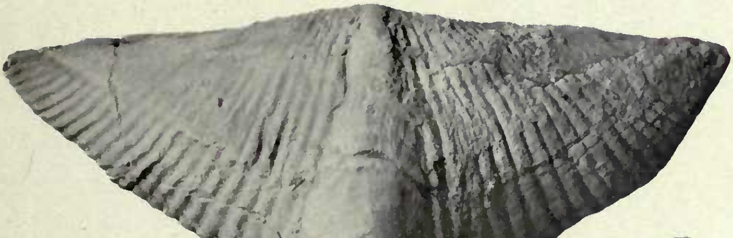
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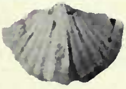
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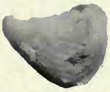
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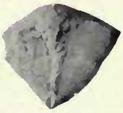
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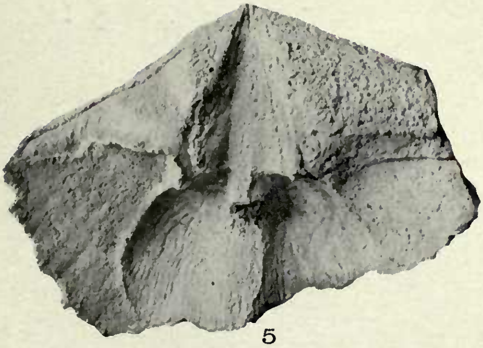
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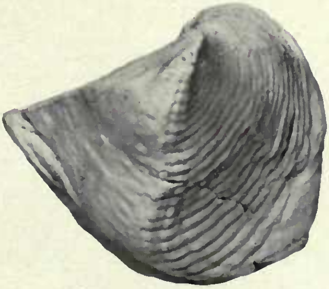
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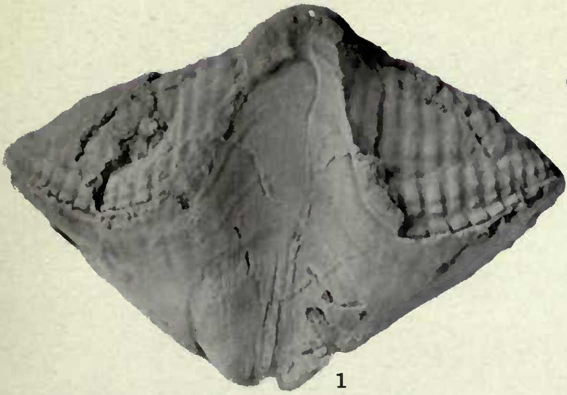
EXPLANATION OF PLATE LXXI.

Figs. 1-2. SYRINGOTHYRIS TEXTUS (Hall).............................p. 399
Anterior and posterior views of a nearly complete internal cast. (W. M., No. 7915.)
Residual chert, Jasper County, Missouri.

Figs. 3-7. SYRINGOTHYRIS SUBCUSPIDATUS (Hall).....................p. 401
Anterior, brachial, lateral, posterior and pedicle views of a nearly perfect specimen. (W. M., No. 8634.)
Keokuk limestone, Warsaw, Illinois.

Figs. 8-9. SYRINGOTHYRIS? sp.
8. Posterior view of a nearly complete specimen. 9. Anterior view of another example. (W. M., No. 13964.)
Hannibal sandstone, Louisiana, Missouri.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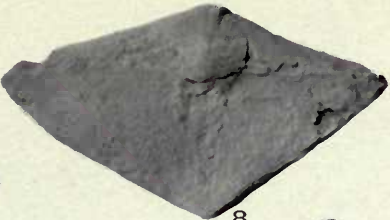
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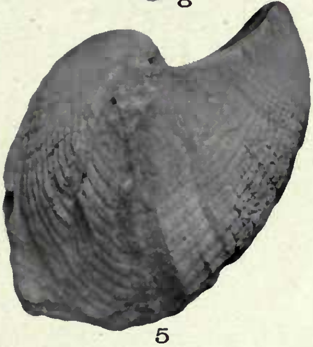
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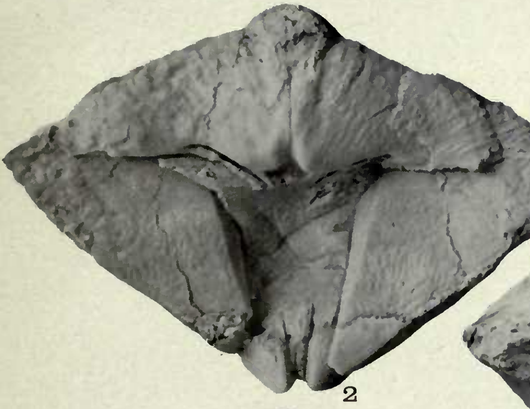
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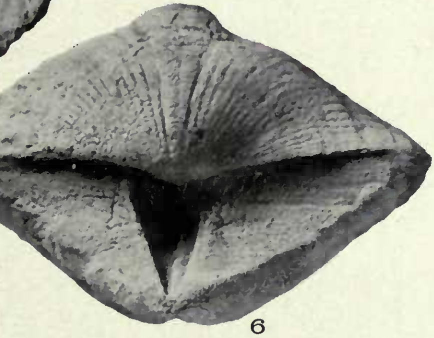
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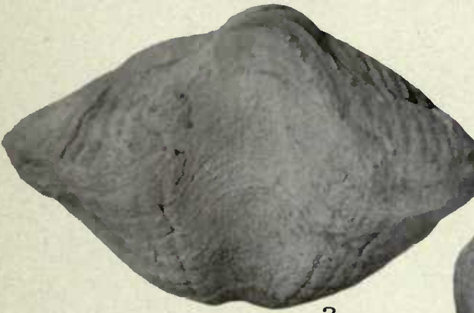
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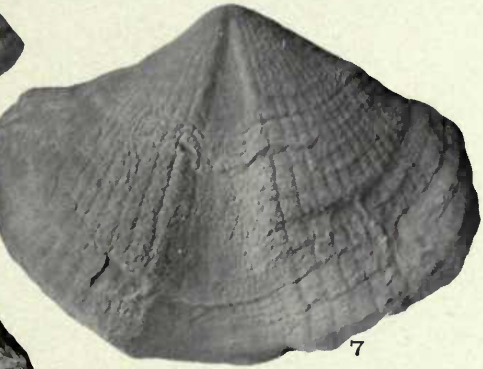
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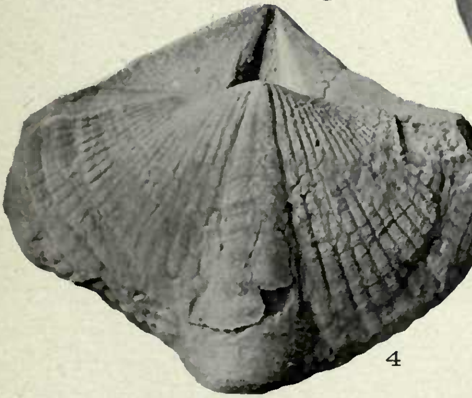
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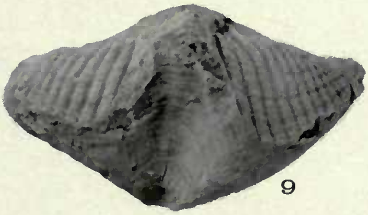
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EXPLANATION OF PLATE LXXII.

Figs. 1-4. SYRINGOTHYRIS PLATYPLEURUS n. sp. . . . . p. 397

1-3. Posterior, anterior and lateral views of a nearly complete internal cast. Holotype. (W. M., No. 13955.)

Residual chert, Sedalia, Missouri.

4. View of the inner surface of the cardinal area of a pedicle valve showing the delthyrial plate with the syrinx. (W. M., No. 7914.)

Burlington limestone, Osceola, Missouri.

Figs. 5-12. SYRINGOTHYRIS EXTENUATUS (Hall) . . . . p. 386

5-6. Posterior and pedicle views of a nearly complete pedicle valve. 7. View of the cardinal area of another specimen. (W. M., No. 13960.)

Kinderhook, Bed No. 3, Burlington, Iowa.

8-12. Posterior, anterior, brachial, pedicle and lateral views of a nearly complete internal cast. (W. M., No. 5929.)

Chonopectus sandstone, Burlington, Iowa.

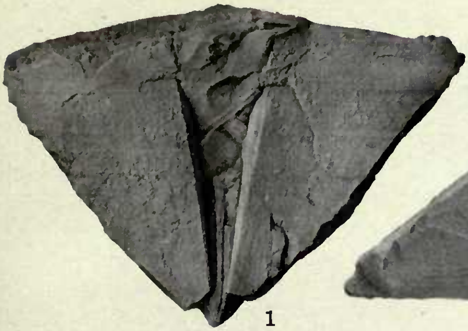
Figs. 13-23. SYRINGOTHYRIS HALLI Winchell . . . . p. 390

13-17. Posterior, anterior, pedicle, brachial and lateral views of one of Winchell's cotypes. (W. M., No. 1369.)

Kinderhook, Bed No. 4, Burlington, Iowa.

18-22. Posterior, anterior, pedicle, brachial and lateral views of a nearly complete specimen. 23. View of a very perfect brachial valve. (W. M., No. 4614.)

Kinderhook, Bed No. 4, Flint River, near Burlington, Iowa.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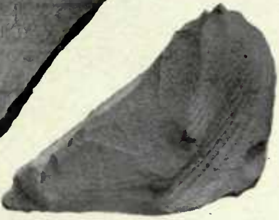
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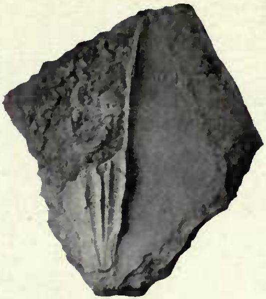
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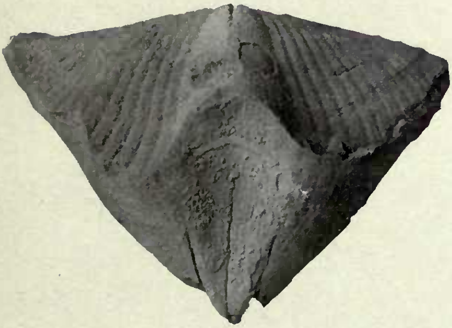
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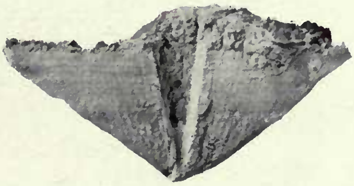
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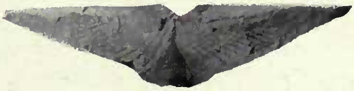
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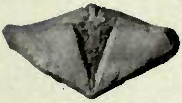
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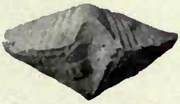
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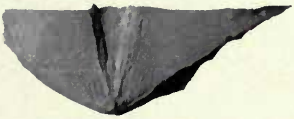
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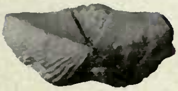
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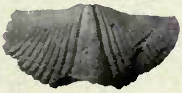
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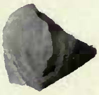
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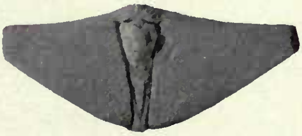
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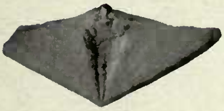
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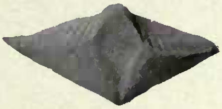
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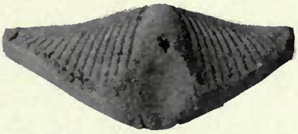
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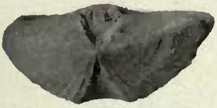
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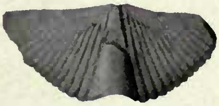
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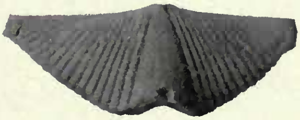
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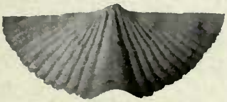
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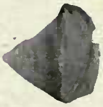
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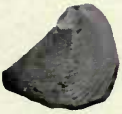
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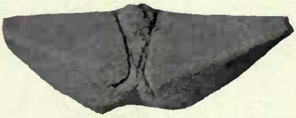
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EXPLANATION OF PLATE LXXIII.

Figs. 1-5. SYRINGOTHYRIS CUSPIDATUS Martin.

Anterior, pedicle, posterior, brachial and lateral views of a very perfect specimen, introduced for comparison with our American species. (W. M., No. 12519.)

Carboniferous limestone, Waulsort, Belgium.

Figs. 6-7. SYRINGOTHYRIS (?) sp.

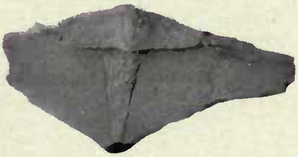
Posterior and lateral views of a nearly complete specimen. (W. M., No. 13961.)

Chouteau limestone, Providence, Missouri.

Figs. 8-10. SYRINGOTHYRIS BUSHBERGENSIS n. sp. .... p. 391

8. Posterior view of an incomplete internal cast of a pedicle valve. 9. Plaster cast from a natural mould showing the cardinal area of a pedicle valve. 10. Internal cast of an incomplete pedicle valve showing an impression of the syrinx. (W. M., No. 13970.)

Bushberg sandstone, near Sulphur Springs, Missouri.



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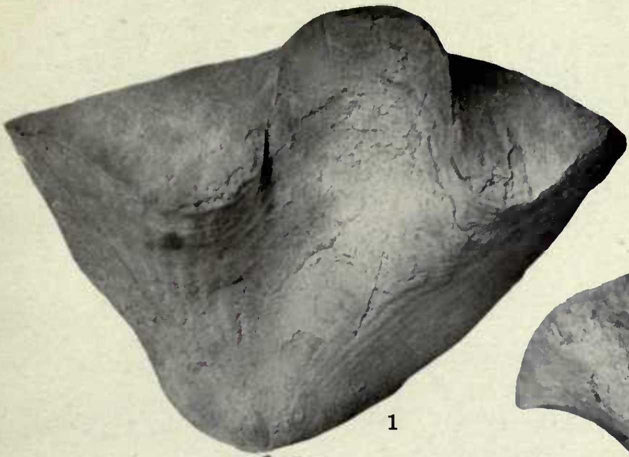

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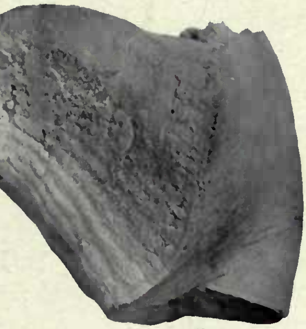

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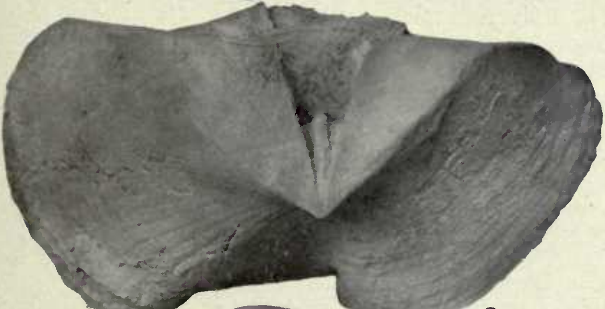

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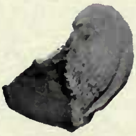

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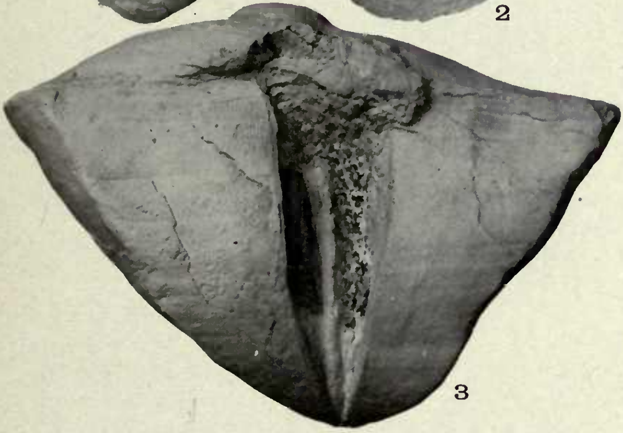

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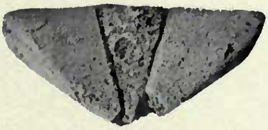

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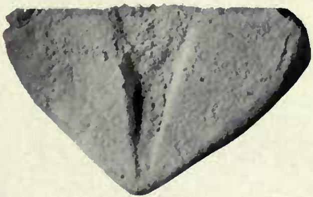

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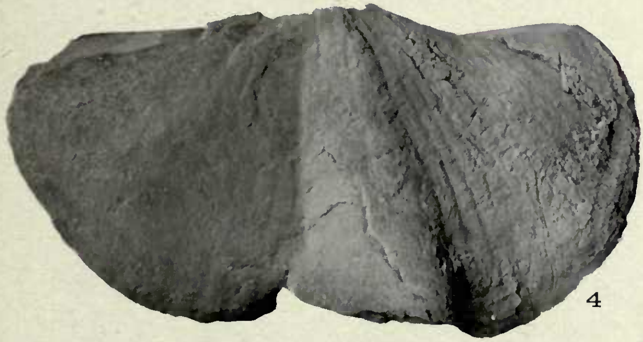

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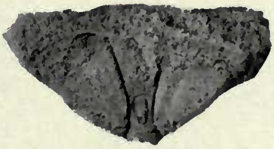

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EXPLANATION OF PLATE LXXIV.

Figs. 1-11. Reticularia pseudolineata (Hall) .... p. 429

1-5. Pedicle, brachial, posterior, anterior and lateral views of the holotype. (W. M., No. 7555.)

Keokuk limestone, Warsaw, Illinois.

6-8. Pedicle, brachial and lateral views of a nearly complete specimen. 9. View of a somewhat crushed pedicle valve. (W. M., No. 13737.)

Keokuk limestone, Keokuk, Iowa.

10-11. Pedicle and brachial views of a nearly complete internal cast. (D. K. G., No. 2501.)

Residual chert, South Branch, Callaway County, Missouri.

Figs. 12-22. Reticularia setigera (Hall) .... p. 431

12-16. Pedicle, brachial, posterior, anterior and lateral views of a very perfect specimen. (W. M., No. 7696.)

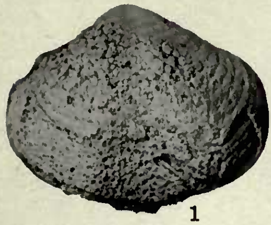
Chester Group, Southern Illinois.

17. View of the internal cast of a pedicle valve. 18. View of the internal cast of a brachial valve. (W. M., No. 13972.)

Seneca chert, Seneca, Missouri.

19-22. Pedicle, brachial, lateral and posterior views of a nearly complete specimen. (W. M., No. 7632.)

Chester Group, Monroe County, Illinois.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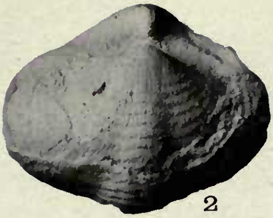
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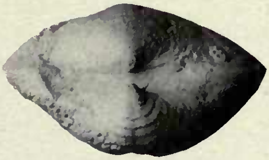
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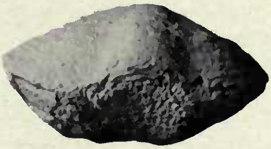
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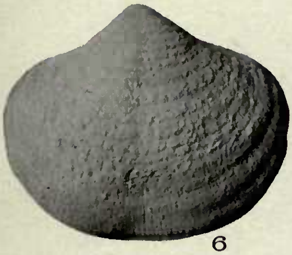
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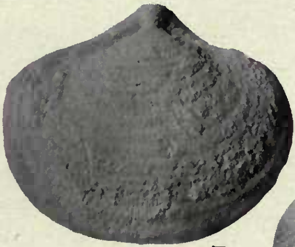
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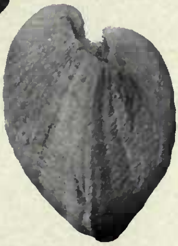
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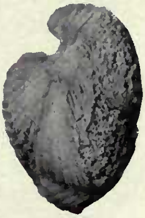
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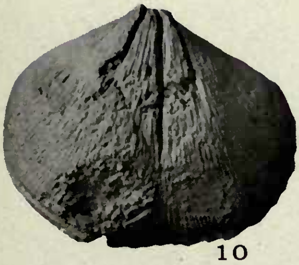
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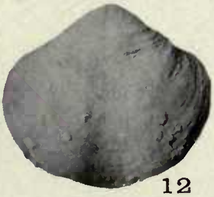
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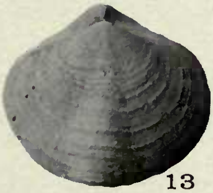
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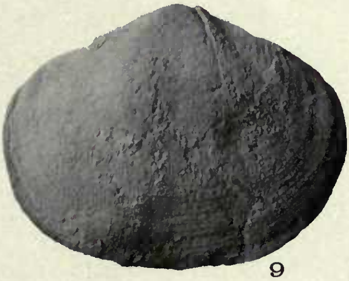
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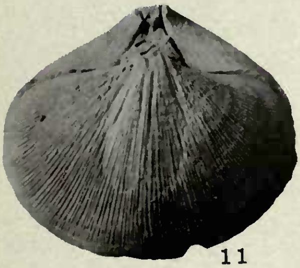
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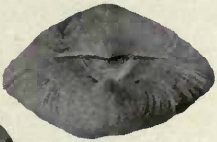
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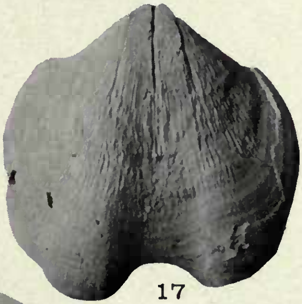
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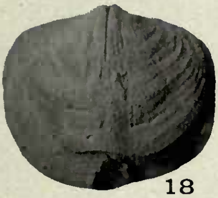
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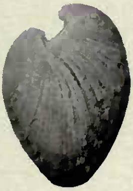
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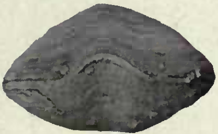
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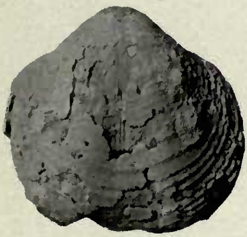
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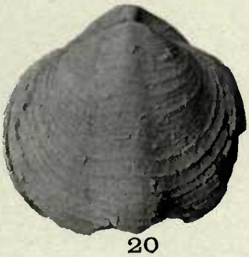
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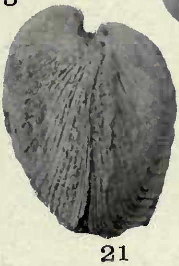
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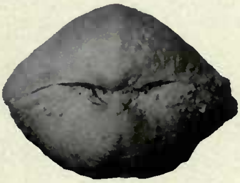
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EXPLANATION OF PLATE LXXV.

Figs. 1-10. Martinia contracta (Meek and Worthen)...............p. 420
1-4. Pedicle, brachial, lateral and anterior views of a very perfect specimen. 5-7. Pedicle, brachial and posterior views of another specimen. 8-10. Lateral, brachial and anterior views of a third specimen. (W. M., No. 14777.)
Chester Group, Red Bud, Illinois.

Figs. 11-14. Martinia sulcata n. sp................................p. 422
11-13. Pedicle, brachial and anterior views of a nearly complete specimen. 14. Brachial view of another specimen. Cotypes. (W. M., No. 13677.)
Chester Group, Meade County, Kentucky.

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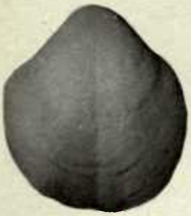
Pedicle, brachial, lateral, posterior and anterior views of the holotype. (W. M., No. 7558.)
Salem limestone, Lanesville, Indiana.

Fig. 20. Reticularia pseudolineata (Hall)..........................p. 429
Posterior view of an internal cast probably belonging to this species. (W. M., No. 10764.)
Residual chert, Springfield, Missouri.

Figs. 21-33. Reticularia cooperensis (Swallow)...................p. 428
21-25. Pedicle, brachial, lateral, posterior and anterior views of the holotype of *R. hirta* White and Whitfield. (U. M., No. 1367.)
Kinderhook, Bed No. 7, Burlington, Iowa.
26-30. Anterior, lateral, pedicle, brachial and posterior views of a nearly complete specimen. 30-33. Pedicle, anterior and brachial views of another specimen. (W. M., No. 9701.)
Chouteau limestone, Pettis County, Missouri.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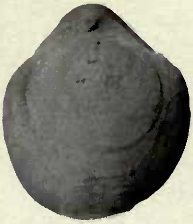
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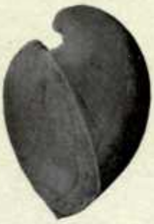
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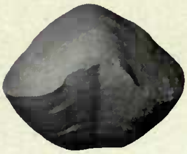
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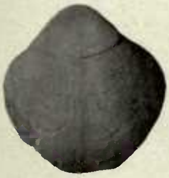
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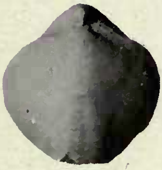
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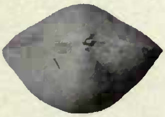
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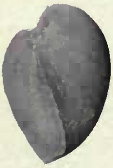
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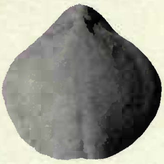
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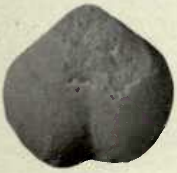
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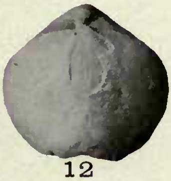
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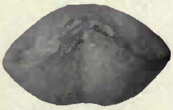
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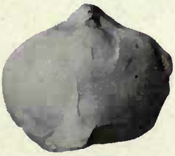
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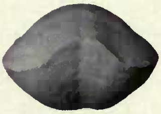
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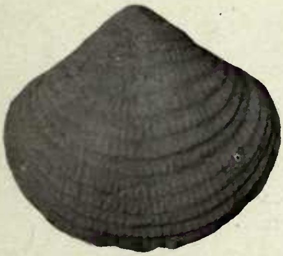
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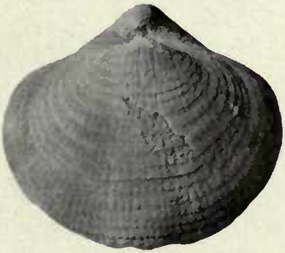
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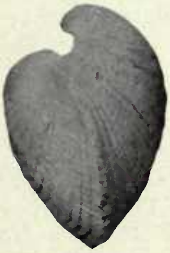
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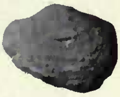
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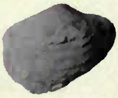
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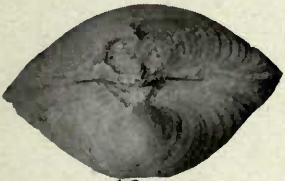
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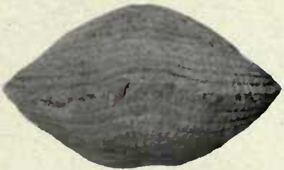
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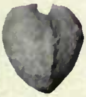
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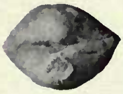
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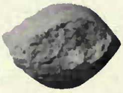
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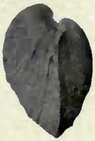
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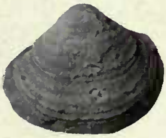
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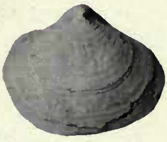
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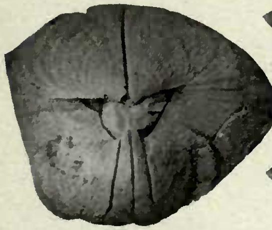
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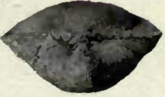
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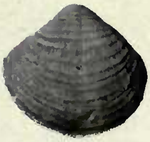
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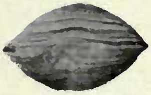
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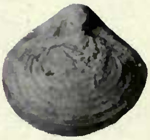
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EXPLANATION OF PLATE LXXVI.

Figs. 1-3. ACAMBONA PRIMA White .... p. 449
Pedicle, brachial and lateral views of the holotype. (U. M., No. 1705.)
Burlington limestone, Burlington, Iowa.

Figs. 4-6. EUMETRIA PERSTRIALIS Rowley .... p. 441
Pedicle, brachial and lateral views of the holotype. (R. R. R.)
Burlington white chert, Louisiana, Missouri.

Figs. 7-11. EUMETRIA ALTIROSTRIS (White) .... p. 438
7-10. Brachial, lateral, posterior and anterior views of a nearly complete specimen. 11. Brachial view of another specimen. (W. M., No. 10575.)
English River Gritstone, Maple Mill, Washington County, Iowa.

Fig. 12. EUMETRIA OSAGENSIS (Swallow) .... p. 439
Brachial view of an imperfect specimen. (W. M., No. 12387.)
Chouteau limestone, Missouri.

Figs. 13-17. EUMETRIA VERA (Hall) .... p. 444
Pedicle, brachial, lateral, anterior and posterior views of a nearly perfect specimen. (W. M., No. 13575.)
Chester Group, Chester, Illinois.

Figs. 18-24. EUMETRIA VERNEUILIANA (Hall) .... p. 442
18-21. Brachial, pedicle, anterior and lateral views of a nearly perfect specimen. 22-24. Pedicle, brachial and lateral views of another specimen. (W. M., No. 7830.)
Salem limestone, Spergen Hill, Indiana.

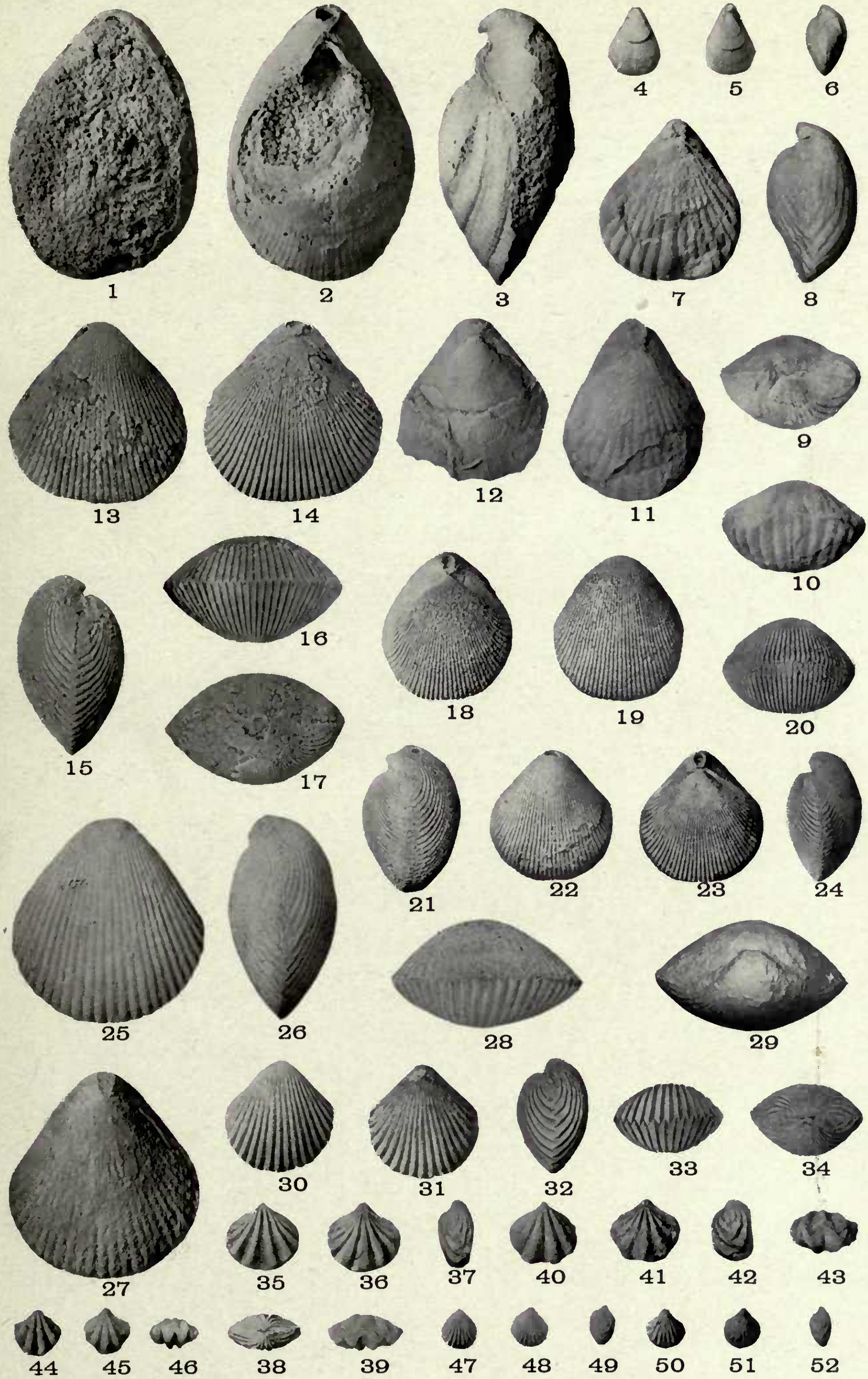
Figs. 25-29. EUMETRIA COSTATA (Hall) .... p. 445
Pedicle, lateral, brachial, anterior and posterior views of a nearly perfect specimen. (W. M., No. 7833.)
Chester Group, Chester, Illinois.

Figs. 30-34. EUMETRIA ACUTICOSTA n. sp .... p. 447
Pedicle, brachial, lateral, anterior and posterior views of the holotype. (W. M., No. 14778.)
Chester Group, Johnson County, Illinois.

Figs. 35-46. PTYCHOSPIRA SEXPLICATA (White and Whitfield) .... p. 435
35-39. Pedicle, brachial, lateral, posterior and anterior views of a nearly perfect specimen. 40-43. Pedicle, brachial, lateral and anterior views of another specimen. (W. M., No. 9688.)
Chouteau limestone, Pettis County, Missouri.
44-46. Pedicle, brachial and anterior views of a metatype of *Retzia raricosta* Rowley. (R. R. R.)
Burlington white chert, Louisiana, Missouri.

Figs. 47-52. HUSTEDIA CIRCULARIS (Miller) .... p. 451
47-49. Pedicle, brachial and lateral views of a nearly perfect specimen. (D. K. G., No. 1801.)
Chouteau limestone, Sedalia, Missouri.
50-52. Pedicle, brachial and lateral views of another specimen. (W. M., No. 9727.)
Chouteau limestone, Pettis County, Missouri.

Illinois State Geological Survey. Monograph No. 1. Plate LXXVI.



EXPLANATION OF PLATE LXXVII.

Figs. 1-20. Athyris crassicardinalis White .... p. 471

1-2. Exterior and interior views of a brachial valve. 3-4. Exterior and interior views of a small pedicle valve. Cotypes. (U. M., No. 1358.)

Kinderhook, Bed No. 7, Burlington, Iowa.

5-6. Exterior and interior views of a brachial valve. 7. Posterior view of a shell with both valves in articulation. 8-9. Exterior and interior views of a small pedicle valve. 10-11, and 12-13. Exterior and interior views of two pedicle valves. 14-16. Exterior views of three pedicle valves. 17-18. Exterior and interior views of a brachial valve. 19. Exterior view of a brachial valve. 20. Interior view of a brachial valve. (W. M., No. 9817.)

Chouteau limestone, Sedalia, Missouri.

Figs. 21-25. Athyris crassicardinalis White (??).

21-23. Pedicle, brachial and lateral views of a nearly complete pedicle valve. 24-25. Views of two brachial valves. (W. M., No. 6679.)

Kinderhook, Bed No. 6, Burlington, Iowa.

Figs. 26-31. Ambocœlia levicula Rowley .... p. 426

26-28. Pedicle, brachial and lateral views of a metatype. 29-31. Similar views of the same specimen enlarged (x4). (R. R. R.)

Burlington white chert, Louisiana, Missouri.

Figs. 32-35. Ambocœlia parva Weller .... p. 424

32-33. Views of two pedicle valves, cotypes. 34-35. Views of the same specimens enlarged (x4). (W. M., No. 5952.)

Northview sandstone, Northview, Missouri.

Figs. 36-43. Ambocœlia unionensis n. sp .... p. 425

36-37. Views of two pedicle valves. 38-39. Views of the same specimens enlarged (x4). 40. View of a brachial valve. 41. View of the same specimen enlarged (x4). 42-43. Views of two large pedicle valves. Cotypes. (W. M., No. 14782.)

Kinderhook, 3½ miles northwest of Jonesboro, Illinois.

Figs. 44-54. Ambocœlia minuta White .... p. 423

44-47. Pedicle, brachial, lateral and posterior views of a large specimen (x4). 48-50. Pedicle, brachial and lateral views of another specimen (x4). 51-54. Pedicle, brachial, lateral and posterior views of a third specimen (x4). (W. M., No. 6719.)

Louisiana limestone, Louisiana, Missouri.

Figs. 55-59. Composita (?) corpulenta (Winchell) .... p. 495

Pedicle, brachial, lateral, anterior and posterior views of a nearly complete specimen. (W. M., No. 13899.)

Chonopectus sandstone, Burlington, Iowa.

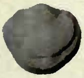
Figs. 60-69. ATHYRIS DENSA Hall and Clarke........................p. 469

60-63. Pedicle, brachial, lateral and anterior views of a nearly complete specimen. 64-65. Exterior and interior views of a nearly perfect pedicle valve. 66-67. Exterior and interior views of another pedicle valve. Cotypes. (W. M., No. 12364.)

Salem limestone, Colesburgh, Kentucky.

68-69. External and internal views of a pedicle valve, the holotype of *Centronella crassicardinalis* White. (A. M. N. H., No. 5067—1.)

Salem limestone, Spergen Hill, Indiana.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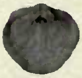
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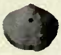
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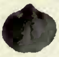
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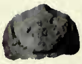
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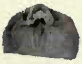
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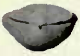
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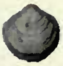
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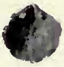
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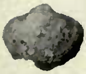
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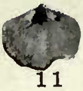
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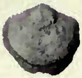
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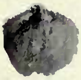
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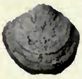
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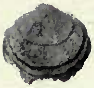
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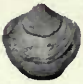
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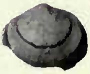
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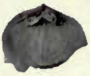
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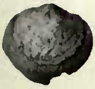
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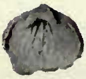
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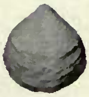
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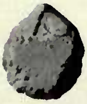
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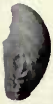
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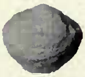
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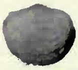
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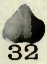
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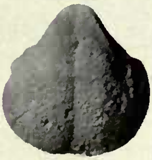
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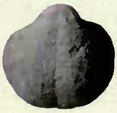
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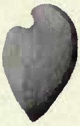
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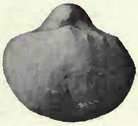
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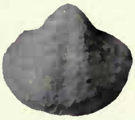
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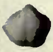
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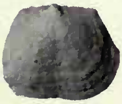
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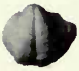
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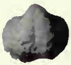
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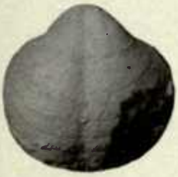
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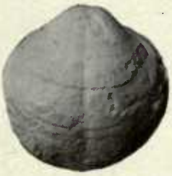
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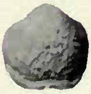
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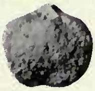
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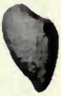
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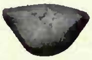
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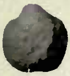
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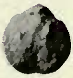
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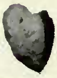
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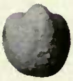
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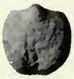
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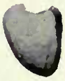
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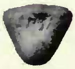
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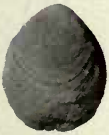
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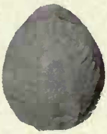
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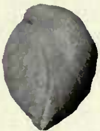
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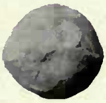
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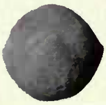
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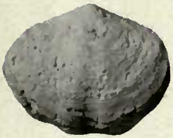
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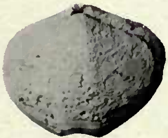
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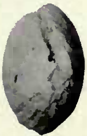
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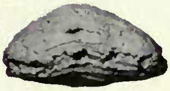
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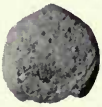
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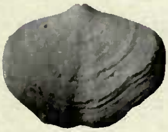
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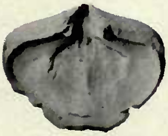
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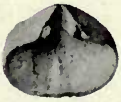
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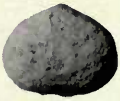
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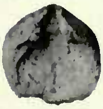
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EXPLANATION OF PLATE LXXVIII.

Figs. 1-5. ATHYRIS LAMELLOSA (Lèveillè) .... p. 465

1. Pedicle view of a nearly complete specimen. (W. M., No. 7605.)
Keokuk limestone, Warsaw, Illinois.

2. Pedicle view of a nearly complete internal cast. (W. M., No. 14224.)
Residual chert, Cooper County, Missouri.

3-4. Pedicle and posterior views of a nearly complete internal cast. (W. M., No. 7599.)
Burlington chert, Louisiana, Missouri.

Figs. 6-9. ATHYRIS PAPILIONIFORMIS McChesney .... p. 468

Pedicle, brachial, lateral and posterior views of a sulphur cast of the holotype. (W. M., No. 13232.)
Chester Group, Fountain Bluff, Illinois.

Figs. 10-14. ATHYRIS HANNIBALENSIS (Swallow) .... p. 467

10-12. Lateral, brachial and anterior views of a nearly complete specimen. 13-14. Pedicle and posterior views of another specimen. (W. M., No. 6690.)
Louisiana limestone, Louisiana, Missouri.

Figs. 15-20. ATHYRIS LAMELLOSA (Lèveillè) .... p. 465

15-16. Views of two pedicle valves upon one of which the lamellar extensions of the shell are well preserved. (W. M., No. 13539.)
Fern Glen formation, Fern Glen, Missouri.

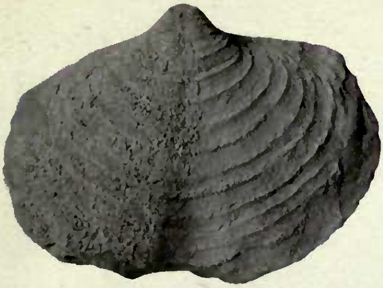
17-20. Brachial, pedicle, lateral and anterior views of an exfoliated specimen. (W. M., No. 8545.)
Pierson limestone, near Springfield, Missouri.

Figs. 21-24. CLIOTHYRIDINA GLENPARKENSIS n. sp .... p. 473

21-22. Pedicle and lateral views of a nearly complete specimen. 23-24. Brachial and posterior views of another specimen. (W. M., No. 13901.)
Fern Glen formation, Fern Glen, Missouri.

Fig. 25. CLIOTHYRIDINA PARVIROSTRA (Meek and Worthen) .... p. 481

View of the internal cast of a pedicle valve. (W. M., No. 383.)
Residual chert, Springfield, Missouri.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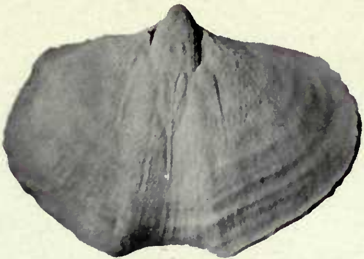
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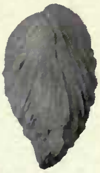
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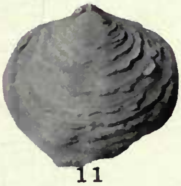
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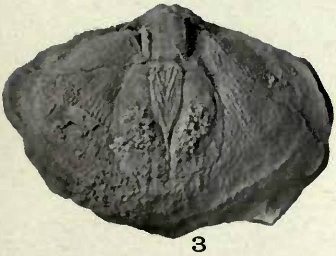
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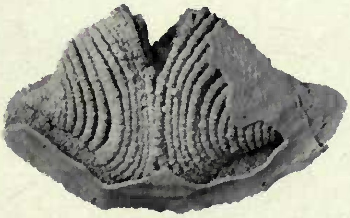
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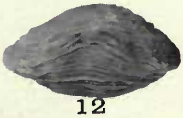
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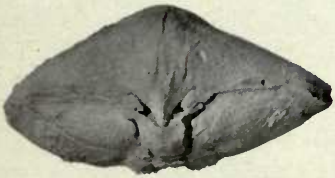
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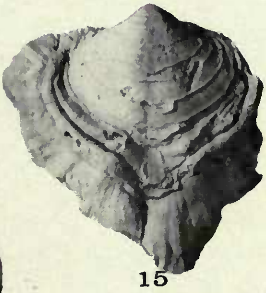
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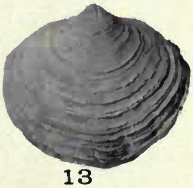
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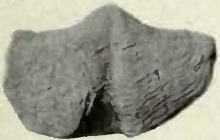
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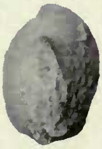
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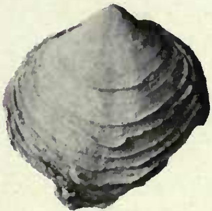
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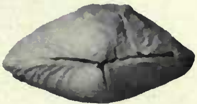
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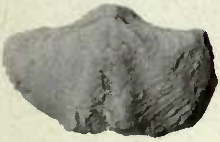
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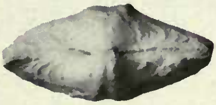
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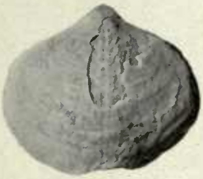
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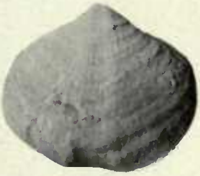
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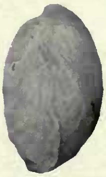
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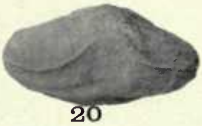
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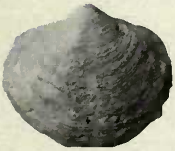
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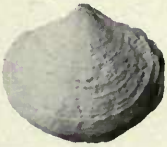
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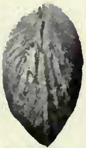
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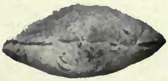
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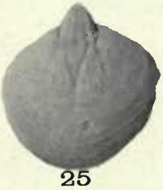
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EXPLANATION OF PLATE LXXIX.

Figs. 1-11. Cliothyridina obmaxima (McChesney)..................p. 475

1. View of a large pedicle valve. (W. M., No. 7592.)
Fern Glen formation, Monroe County, Illinois.

2-6. Pedicle, brachial, anterior, posterior and lateral views of a nearly perfect specimen. (W. M., No. 13917.)
Fern Glen formation, Chautauqua, Illinois.

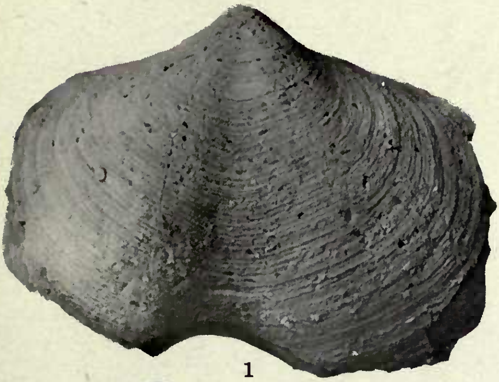
7-11. Pedicle, brachial, anterior, lateral and posterior views of a nearly perfect specimen. (W. M., No. 7596.)
Keokuk limestone, Keokuk, Iowa.

Fig. 12. Cliothyridina incrassata (Hall)..........................p. 477

View of a pedicle valve. (W. M., No. 342.)
Burlington limestone, Springfield, Missouri.

Figs. 13-16. Cliothyridina prouti (Swallow)......................p. 474

Pedicle, brachial, anterior and lateral views of a nearly perfect specimen. (W. M., No. 46951.)
Fern Glen formation, near Kimmswick, Missouri.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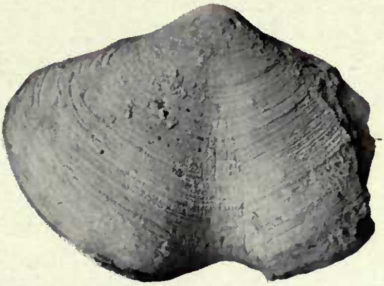
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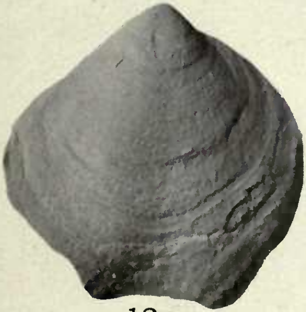
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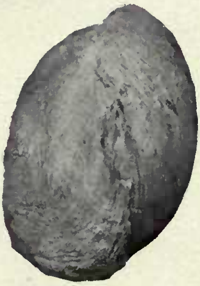
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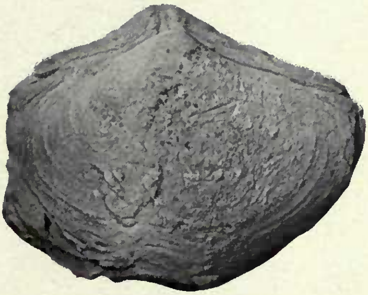
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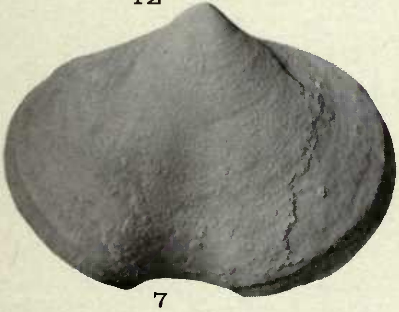
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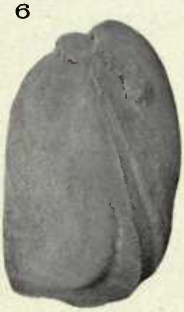
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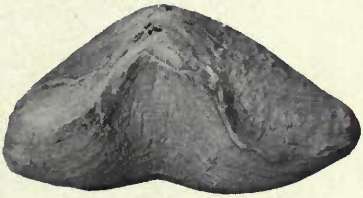
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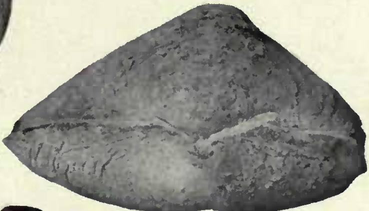
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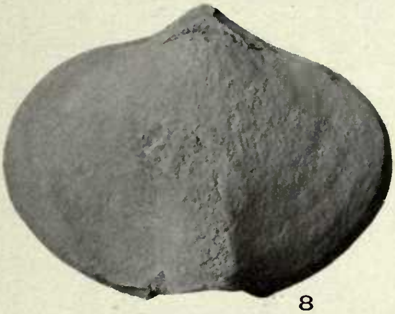
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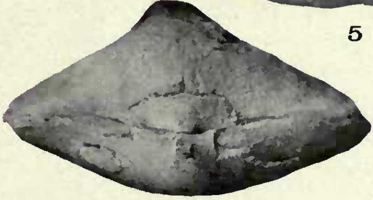
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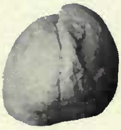
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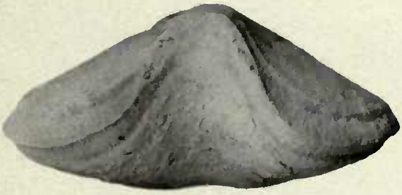
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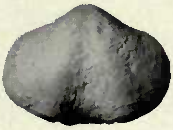
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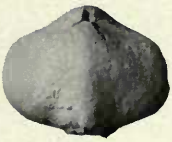
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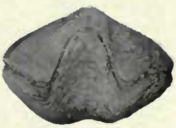
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EXPLANATION OF PLATE LXXX.

Figs. 1-12. Cliothyridina tenuilineata (Rowley)..................p. 478

1-3, 4-6. Pedicle, brachial and lateral views of two specimens. (U. M., No. 1358.)

Kinderhook, Bed No. 6, Burlington, Iowa.

7-9, 10-12. Pedicle, brachial and lateral views of two specimens, metatypes. (R. R. R.)

Burlington white chert, Louisiana, Missouri.

Figs. 13-24. Cliothyridina hirsuta (Hall).........................p. 479

13-15, 16-18. Pedicle, brachial and lateral views of two specimens. (W. M., No. 13920.)

Salem limestone, Hull's Hollow, Madison County, Illinois.

19-21, 22-24. Pedicle, brachial and lateral views of two specimens. (W. M., No. 1369.)

Salem limestone, near Boonville, Missouri.

Figs. 25-30. Cliothyridina lenticularis n. sp......................p. 480

25-27, 28-30. Pedicle, brachial and lateral views of two specimens. (W. M., No. 12992.)

St. Louis limestone, near Carondelet, Missouri.

Figs. 31-60. Cliothyridina sublamellosa (Hall)....................p. 482

31-33, 34-36. Pedicle, brachial and lateral views of two young specimens having the form and size of *C. hirsuta.* (W. M., No. 7628.)

Chester Group, Chester, Illinois.

37-39, 40-42, 43-45. Pedicle, brachial and lateral views of three young specimens having the general character of *C. hirsuta.* (W. M., No. 13921.)

Lower Chester, Fairview Point, Hardin Co., Illinois.

46-48. Pedicle, brachial and lateral views of an undistorted but somewhat exfoliated specimen. 49-50. Pedicle and lateral views of another specimen. (W. M., No. 7613.)

Chester Group, Chester, Illinois.

51-53, 54-56. Pedicle, brachial and lateral views of two specimens partially preserving the surface spines. (W. M., No. 7628.)

Chester Group, Chester, Illinois.

57-58. Brachial views of two different specimens. 59-60. Pedicle views of two other specimens. (W. M., No. 14781.)

Lower Chester, Fairview Point, Hardin Co., Illinois.

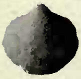
Figs. 61-66. Cliothyridina parvirostra (Meek & Worthen).........p. 481

61-63. Pedicle, lateral and brachial views of a slightly crushed specimen. (W. M., No. 7611.)

Keokuk limestone, Jersey County, Illinois.

64-66. Brachial, lateral and pedicle views of a nearly complete specimen. (W. M., No. 7614.)

Keokuk limestone, Warsaw, Illinois.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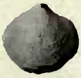
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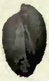
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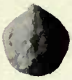
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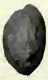
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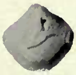
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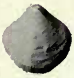
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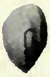
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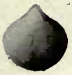
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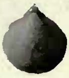
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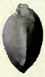
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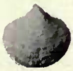
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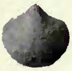
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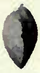
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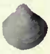
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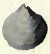
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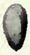
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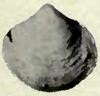
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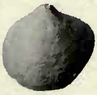
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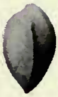
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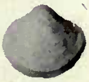
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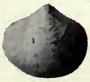
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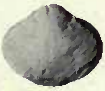
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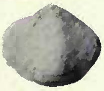
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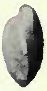
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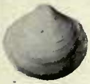
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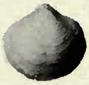
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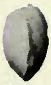
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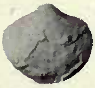
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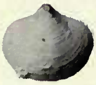
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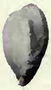
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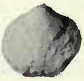
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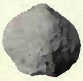
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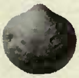
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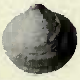
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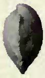
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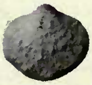
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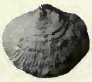
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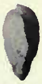
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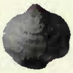
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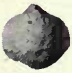
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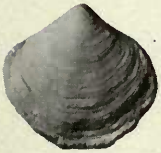
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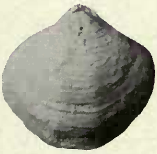
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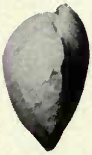
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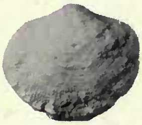
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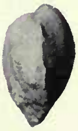
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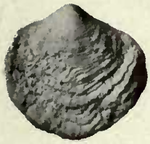
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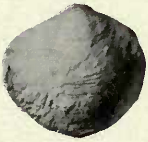
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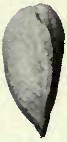
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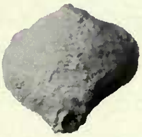
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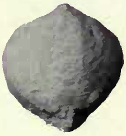
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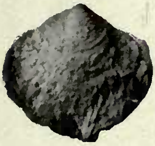
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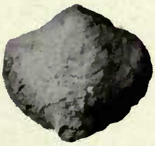
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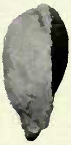
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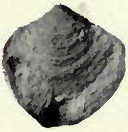
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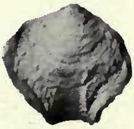
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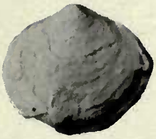
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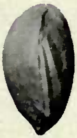
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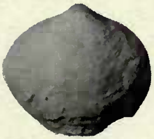
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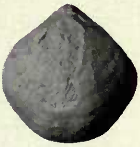
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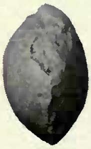
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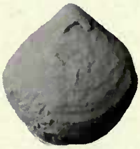
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EXPLANATION OF PLATE LXXXI.

Figs. 1-15. COMPOSITA SUBQUADRATA (Hall) .... p. 489

1-4. Pedicle, brachial, posterior and lateral views of a nearly perfect specimen. 5-8. Anterior, pedicle, brachial and posterior views of another specimen. (W. M., No. 7627.)

Chester Group, Chester, Illinois.

9-11. Pedicle, anterior and lateral views of a nearly complete specimen. 12-15. Brachial, lateral, anterior and posterior views of a nearly complete specimen. (W. M., No. 13926.)

Chester Group, Chester, Illinois.

Figs. 16-45. COMPOSITA TRINUCLEA (Hall) .... p. 486

16-20. Pedicle, brachial, lateral, posterior and anterior views of a very perfect specimen. 21-24. Pedicle, brachial, anterior and posterior views of another specimen. 25-26. Pedicle and brachial views of a third specimen. (W. M., No. 7620.) 27-30. Pedicle, brachial, lateral and anterior views of a nearly perfect specimen. (W. M., No. 389.)

Salem limestone, Spergen Hill, Indiana.

31-34. Lateral, pedicle, brachial and anterior views of a nearly perfect, large example. (W. M., No. 13926.)

Salem limestone, Hull's Hollow, Madison County, Illinois.

35-36. Pedicle and lateral views of a very narrow and elongate example. 37-38. Brachial and anterior views of an old shell. 39-42. Pedicle, lateral, anterior and posterior views of a nearly perfect specimen. 43. Brachial view of a nearly perfect specimen. 44-45. Anterior and posterior views of another specimen. (W. M., No. 7617.)

Pella Beds, Pella, Iowa.

Figs. 46-51. COMPOSITA LEWISENSIS n. sp .... p. 488

46-48. Pedicle, brachial and posterior views of a nearly perfect specimen. 49-51. Pedicle, lateral and anterior views of another specimen. Cotypes. (D. K. G., No. 203.)

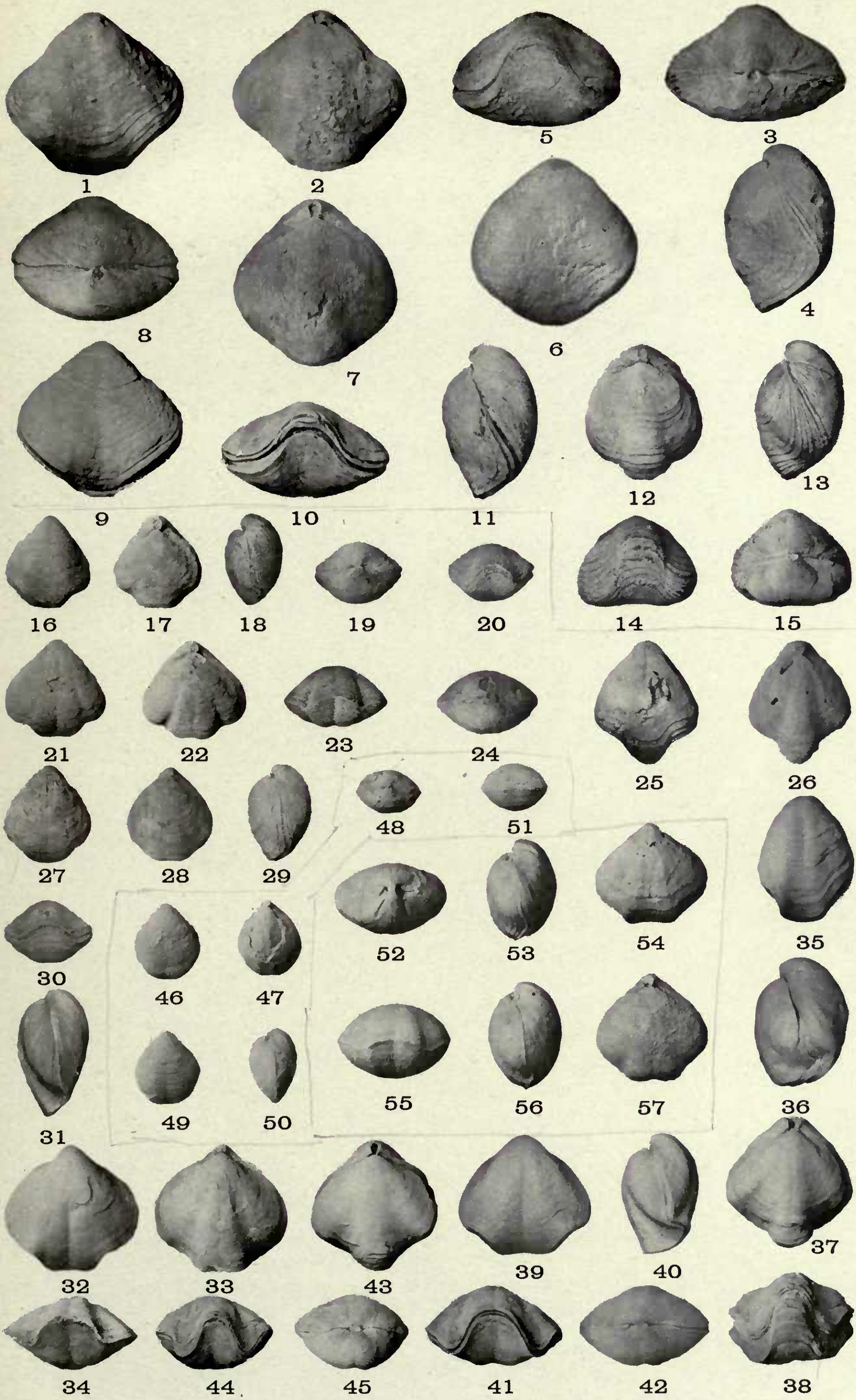
Patrick Quarry, Middle Fabius River, Lewis County, Missouri.

Figs. 52-57. COMPOSITA PENTAGONIA n. sp .... p. 492

52-54. Posterior, lateral and pedicle views of a very perfect internal cast. 55-57. Anterior, lateral and brachial views of another example. Cotypes. (D. K. G., No. 102.)

Residual chert, South Branch, Callaway County, Missouri.

PLATE LXXXI.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EXPLANATION OF PLATE LXXXII.

Figs. 1-10. COMPOSITA SULCATA n. sp..................................p. 490

1-5. Pedicle, brachial, lateral, posterior and anterior views of a nearly complete specimen. 6-10. Anterior, posterior, brachial, lateral and pedicle views of a smaller example. Cotypes. (W. M., No. 13782.)

Chester Group, Meade County, Kentucky.

Figs. 11-13. COMPOSITA OPPOSITA (White and Whitfield)..............p. 494

Pedicle, brachial and lateral views of the holotype. (A. M. N. H., No. 5000-1.)

Upper Kinderhook, Burlington, Iowa.

Figs. 14-20. COMPOSITA LÆVIS n. sp..................................p. 491

14-17. Pedicle, brachial, lateral and posterior views of a very perfect specimen. 18-20. Pedicle, brachial and anterior views of another specimen. Cotypes. (D. K. G., No. 303.)

Chester Group, Breckinridge Co., Kentucky.

Figs. 21-26. COMPOSITA GLOBOSA n. sp..................................p. 493

21-23. Pedicle, lateral and anterior views of a nearly perfect specimen. 24-26. Brachial, posterior and anterior views of another specimen. Cotypes. (W. M., No. 3003.)

Keokuk limestone, near Springfield, Missouri.

Figs. 27-38. NUCLEOSPIRA BARRISI White ....p. 455

27-31. Pedicle, brachial, posterior, anterior and lateral views of a nearly complete specimen. 32-33. Exterior and interior views of a pedicle valve. 34-35. Exterior and interior views of another pedicle valve. 36. View of a pedicle valve. 37. View of a brachial valve. 38. Interior view of an imperfect brachial valve. Cotypes. (U. M., No. 1360.)

Kinderhook, Bed No. 7, Burlington, Iowa.

Figs. 39-42. NUCLEOSPIRA OBESA Rowley.................................p. 457

39-41. Pedicle, brachial and lateral views of a metatype. 42. Brachial view of the same specimen enlarged (x3). (R. R. R.)

Burlington white chert, Louisiana, Missouri.

Figs. 43-48. NUCLEOSPIRA ROWLEYI n. sp..............................p. 454

43-44, 45-46, 47-48. Pedicle and brachial views of three different individuals, enlarged (x 4). Cotypes. (W. M., No. 6733.

Louisiana limestone, Louisiana, Missouri.

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49-54. Views of six separate valves. 55-60. Views of the same valves enlarged (x4). Cotypes. (W. M., No. 11349.)

Glen Park limestone, Glen Park, Missouri.

Figs. 61-63. CAMAROPHORELLA LENTICULARIS (White and Whitfield)...p. 459

61. View of an internal cast of a pedicle valve. 62-63. Views of two internal casts of brachial valves. Cotypes. (U. M., No. 1356.)

Kinderhook, Bed No. 5, Burlington, Iowa.

Figs. 64-69. ROWLEYELLA FABULITUS (Rowley) .... p. 463

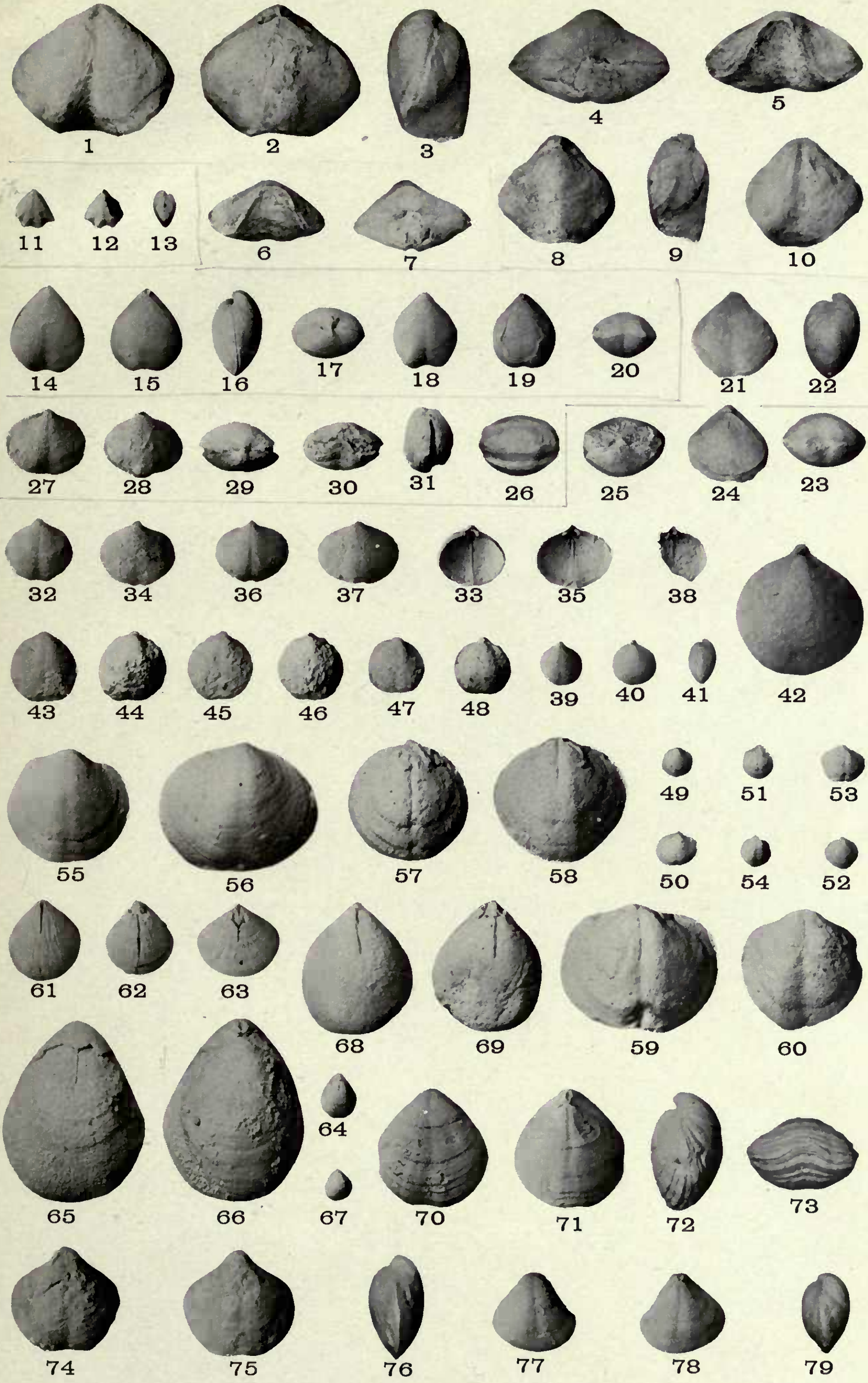
64. Pedicle view of a nearly complete specimen from which the shell is partially removed, showing the median septum. The spiral brachidium is clearly shown in this specimen, but does not appear in the photograph. 65-66. Pedicle and brachial views of the same specimen enlarged (x4). 67. Pedicle view of a smaller specimen from which the shell has been removed on each side. 68-69. Pedicle and brachial views of the same specimen (x4) showing the median septum in each valve. (W. M., No. 14279.)

Burlington white chert, Louisiana, Missouri.

Figs. 70-79. CAMAROPHORELLA MISSOURIENSIS (Winchell) .... p. 460

70-73. Pedicle, brachial, lateral and anterior views of the holotype. (U. M., No. 1993.) 74-76, 77-79. Pedicle, brachial and lateral views of two specimens, metatypes of *Seminula buckleyi* Rowley. (R. R. R.)

Louisiana limestone, Louisiana, Missouri.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EXPLANATION OF PLATE LXXXIII.

Figs. 1-2. SPIRIFER FORBESI Norwood and Pratten....................p. 331
Views of two separate brachial valves. (W. M., Nos. 5654 and 13531.)
Burlington limestone, Springfield, Missouri, and Burlington, Iowa.

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Chouteau limestone, Calhoun County, Illinois.

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Brachial view of an internal cast. (W. M., No. 7501.)
Kinderhook, Bed No. 5, Burlington, Iowa.

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Burlington limestone, Burlington, Iowa.

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Kinderhook, Bed No. 7, Burlington, Iowa.

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Pedicle and lateral views of the holotype. (A. M. N. H., No. 5087)
Salem limestone, Spergen Hill, Indiana.

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Keokuk limestone, Nauvoo, Illinois.

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Kinderhook sandstone, Kinderhook, Illinois.

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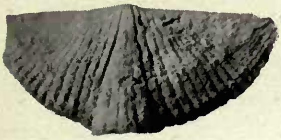
21. View of the internal cast of a large pedicle valve. 22. View of an impression of the pedicle valve showing the cardinal spines. (W. M., No. 14779.)
Chonopectus sandstone, Burlington, Iowa.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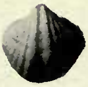
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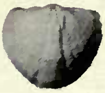
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